







Digitized by the Internet Archive in 2013



1-188

## Southern California Practitioner

## VOLUME XXXII

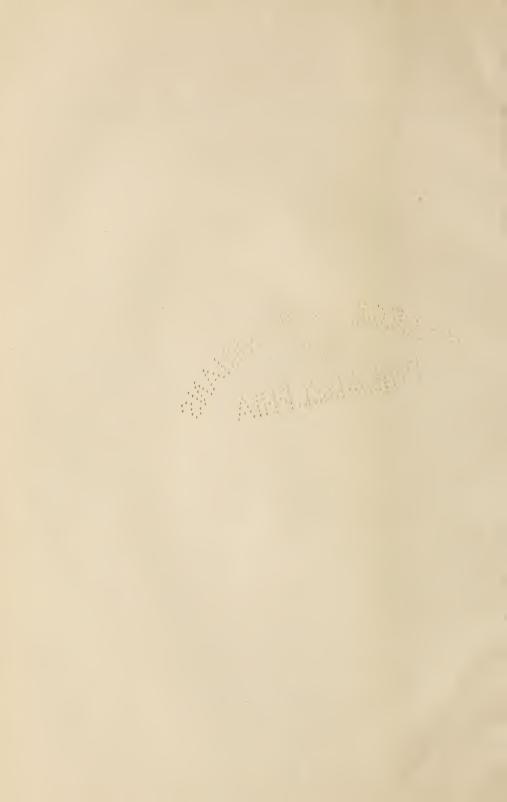
DR. GEO. F. MALSBARY

.. Associated Editors,

Dr. Weller Lindley, Dr. W W. Watkins, Dr. Ross Moore, Dr. George L. Cole, Dr. Cecil E. Reynolds, Dr. Wm. A. Edwards, Dr. Andrew W. Morton, Dr. H. D'Arcy Power, Dr. J. B. O'Neil, Dr. W. H. Dudley, Dr. J. M. Mathews, ... Dr. C. G. Stivers, Dr. Boaidman Reed

Founded in 1885 by Walter Lindley

1414 SOUTH HOPE ST. LOS ANGELES, CALIFORNIA 1917



## INDEX TO VOL. XXXII 1917

## TITLES OF ORIGINAL ARTICLES

D	
Ambition, Egotism and the Social Instinct. By Dr. Cecil Reynolds 47 American Soldier Should Know About Tuberculosis. S. Adolphus Knopf, M.D	169 np- nor 29 nd- ons 101 W 85 Dr 91 P 133 and E 151 E.

## **EDITORIALS**

Action on Salvarsan Patent. 192 Au Revoir Dr. Rea Smith 183 Carrel-Dakin Solution 122 Birth Control 40 Degeneracy—The Value of a Man 140 Does California Climate Change? 21 Dr. E. R. Smith, Death of 191 Dr. S. Adolphus Knopf Doing His Bit. 94 Educational Requirements for Nurses. 94 Ethyl Hydrocuprein (Optichin Hydrochloricum) 95 Food Value of Some Common Package Foods 108 Glaucoma 22	
Foods108	List         192           Tribute to Service         125           Typhoid Fever         93           X-Ray Progress         75

## GENERAL INDEX

Page	Page
Action on Salvarsan Patent192	A System for Scoring Morals or Char-
Acute Poliomyelitis. Draper130	acter Qualities. Dr. G. Hardy
Ambition, Egotism and the Social In-	Clark
stinct. Cecil E. Reynolds, M.D 47	Au Revoir Dr. Rea Smith
American Soldier Should Know About	Bacteriology and Pathology for Nurses.
Tuberculosis. S. Adolphus Knopf,	Roberts
M.D173	Bacteriology for Nurses. Bolduan 44
Anatomical Names. Eycleshymer 78	Birth Control 40
Anatomical Record	Book Reviews
Anatomy of the Tonsil. Dr. C. G. Sti-	9, 27, 44, 59, 78, 98, 129, 146, 164 196
vers117	Brain Tumor, Symptoms. Hugo A.
Artificial Pneumothorax	Kiefer, M.D
Ashton's Gynecology	Breast, The. Deaver
Assembly Bill 1375 80	Cancer Mortality 44
	Cancel Mortanty 11

97211

MAY 24 1918

IV INDEX

Page	Page
Carrel-Dakin Solution122	Medical Clinics of Chicago
Cataract. Fisher 98	Medical Men and Military Service 56
Chemistry of Blood and Urine. Grad-	Medico-Military Material 79
wehl 46	Minnesota Gets Mayo Fortune160
Clinical and Laboratory Technic. Mc-	Miscellaneous10, 79, 100, 111, 147, 166
Chinical and Laboratory Technic. Mc-	Muslesta and Madisine, Talance, 147, 166
Neil 44	Muskets and Medicine. Johnson146
Clinical Bacteriology and Haematol-	Nervous Diseases. Spear's Manual 27
ogy. Emery 98	Observations Drawn from Twenty-two
Conversion of Hamilton Wheeler.	Thousand Surgical Anesthesias.
Prescott Locke	Florence Henderson, R.N154
Crook, Look Out For 22	Obstetrical Notes. McNeile131
Defective Child from the Standpoint of	Oslerism, Editorial107
the Internal Secretions, Dr. Henry	Oslerism a Joke 41
R Harrower101	Our Duty 41
Degeneracy—The Value of a Man, Ed-	Period of Gestation, The. Dr. W. S.
itorial	Philp
Divocuos of Informational Childhood	Physical Exercises for Invalids and
Diseases of Infancy and Childhood.	
Fischer 78	Convalescents. Ochsner131
Does California Climate Change? 21	Potter's Compend of Materia Medica131
Dr. E. R. Smith, Death of	Practical Medicine Series27, 131, 164
Dr. Elizabeth Follansbee147	Progressive Medicine
Editorial Notes	Prostitution in New York City111
. 8, 23, 42, 57, 76, 96, 108, 126, 141, 160, 194	Psychoanalytic Review 28
Educational Requirements for Nurses, 94	Pulmonary Tuberculosis. Otis 98
Einhorn's Diseases of the Stomach129	Quiz-Compend Physiology Brubaker 98
Emergency Surgery. Sluss 78	Quiz-Compend, Physiology. Brubaker. 98 Radium. By Rex Duncan, M.D 1
Ethyl Hydrocuprein (Optochin Hydro-	Raw Eggs Objectionable as a Diet159
	Reference Handbook of the Medical
chloricum) 95	Caianasa Crianasa Cri
Evolution Proving Immortality. Yeiser. 30	Sciences
Eye and Ear Section Meeting 10	Regional Surgery. Binnie164
Fistula in Ano and Tuberculosis199	Roentgen Technic (Diagnostic) Prince.130
Food and Principles of Dietetics.	Starvation (Allen) Treatment of Dia-
Hutchison 78	betes. Hill 98
Food Values of Common Package	Stitt's Diagnostics and Treatment of
Foods, Editorial108	Tropical Diseases146
Geriatrics. I. L. Nascher, M.D 9	Spontaneous Pneumothorax190
Glaucoma	Suggestive Therapeutics. Munro 46
Grading Moral Development141	Testing Aviation Candidate. C. G. Sti-
Gynecology. Lewis	vers, M.D169
How the State Provides for Its Men-	The Bit Our Profession Must Do, Ed-
	itorial 101ession Must 100, Eu-
tally Ill. Dr. L. Vernon Briggs. 70, 88	itorial
Hughes Practice of Medicine 44	To Unicers of M.R.C., U.S.A., Inactive
Internal Secretions in Practical Medi-	List192
cine. Harrower146	Treatment of Ivy Poisoning. Dr. W.
International Clinics	H. Dieffenbach 91
Impotence, Sterility and Artificial Im-	Tribute to Service, Editorial125
pregnation. Davis133	Typhoid Fever, Editorial 93
Induced Pneumothorax in Tuberculosis 197	Urinalysis. Williams 46
Journal of Laboratory and Clinical	Vesico-Vaginal Fistula. Dr. C. P.
Medicine 30	Thomas133
Knopf, Dr S. Adolphus, Doing His Bit. 94	Wassermann and Luetin Reactions in
Los Angeles as a Health Resort 7	Tuberculosis200
	Wall's "The Prescription"186
L. A. Aviation Examining Unit184	X-Ray in Diseases of the Stomach and
Malignant Disease of the Uterus. W.	
O. Henry, M.D	Intestines. Dr. George E. Mals-
Malted Milk, Editorial160	bary
Materia Medica. Bethea146	X-Ray Progress. Editorial
Materia Medica and Therapeutics.	X-Ray Progress. George E. Malsbary,
Wilcox 44	M.D65
Median Age of California Decedents126	Young's Anatomy130



Vol. XXXII.

### LOS ANGELES, JANUARY, 1917

No. 1

#### Editor.

DR. GEO. E. MALSBARY.

#### Associate Editors.

Dr. Walter Lindley, Dr. W. W. Watkins, Dr. Ross Moore, Dr. George L. Cole, Dr. Cecil E. Reynolds, Dr. William A. Edwards, Dr. Andrew W. Morton, Dr. H. D'Arcy Power, Dr. B. J. O'Neill, Dr. Otto G. Wichelskit of Dr. Charles H. Whitman, Dr. Edward T. Dillon, Dr. C. C. Stivers, Dr. Boardman Reed, Dr. W. H. Dudley, Dr. J. M. Mathews, Dr. A. J. Cook.

## RADIUM: ITS ACTION AND SCOPE AS A THERAPEUTIC AGENT,\*

REX DUNCAN, M.D. ATTENDING RADIUM THERAPEUTIST AT THE LOS ANGELES COUNTY HOSPITAL. ATTENDING CLINICIAN IN THE RADIUM CLINIC OF THE GRAVES MEMORIAL DISPENSARY OF THE LOS ANGELES MEDICAL DEPARTMENT OF THE UNIVERSITY OF CALIFORNIA.

Mr. Secretary and Gentlemen:

I assure you that I appreciate the honor conferred upon me by your invitation to address your society this evening. Accepting the suggestion of your secretary, I will endeavor to discuss in a general and comprehensive manner certain physical and chemical properties of radium and its application as a therapeutic agent in the treatment of certain pathological conditions. Some knowledge of the chemical and physical properties of radium is essential to a comprehensive understanding of its therapeutic application.

### Chemical and Physical Properties.

Radium is a metal, atomic weight 226.5, belonging to the same group in the periodic table as calcium, strontium and barium, which it resembles in its chemical reactions. In its pure state it is very unstaple and is usually separated in the form of its salts. The

most common salts are the chlorides, and bromides which are soluble in water, and the sulphates and carbonates which are insoluble. All radium compounds possess the property of radioactivity, which is in proportion to the amount of the element they contain. Heat is liberated spontaneously and continuously, 1 gram liberating 134 calories in one hour.

Radium has the power of spontaneously sending out energy in the form of invisible rays, capable of acting on photographic plates after passing through opaque bodies. By the ionization of gases through which the rays pass, they cause the discharge of the charged electroscope. The velocity of this discharge is easily calculated and is in exact relation to the power of activity possessed by the salt. This is utilized as a very accurate means of comparison and measurement of the

<sup>\*</sup>Read by invitation before the Riverside County Medical Society, Oct. 9, 1916.

radium element content of its compounds.

The therapeutic effect produced by radium is due to the ravs given off in the process of its disintegration. Radium undergoes disintegration in a constant, continuous and regular manner, its one-half life period being 1780 years. The first products of decay are helium and emanation, a gas. emanation is the most important product, for from its further disintegration results Radium A .- Radium B .- Radium C .- Radium D .- Radium E .- and Radium F .- which give rise to the radiations known as Alpha, Beta and Gama rays. These are the rays used in medicine. ' ' ioce-CIN'S

### Rays.

The Alpha rays are parficles of matter about 1/4 the size of the hydrogen atoms, They are deflected by a magnet and have a velocity about one-fourth of that of light and are of low penetra-...

The Beta rays are negatively charged electrons, connecting links between matter and ether. They are slightly deflected by a magnet. They form a heterogenous group, differing greatly in their velocity and consequently their power of penetration. They are for practical purposes, arbitrarily divided into soft, medium and hard rays. They resemble the Cathode rays of the Crooks tube, but are about 500 times more penetrating and have a velocity akin to light. By reason of their velocity and tenuity, they have great powers of penetration and easily traverse substances. While lmm. of lead will absorb the softer rays, several mm. of lead would be necessary to insure their total absorption.

The Gama rays have been described as pulsations of ether of extremely short wave lengths, having a velocity equal to that of light. Inev have extreme powers of penetration and will traverse more than 10 cm. of lead and are practically only annihilated by space. These rays are of great value in the treatment of deep-seated conditions.

#### Emanation.

The emanation of radium is being constantly produced as previously stated, and is intensely radio-active. It disintegrates very rapidly, the one-half life period being 3.85 days. radium salts are placed in hermetically sealed tubes, the emanation does not escape; it is, however, readily given off from salts in solution. From radium salts in solution and with a properly equipped apparatus and laboratory, the emanation may be collected. This may be sealed in tubes of the desired size and shape for local application, or placed in solution, or used as an inhalation or for other methods of internal administration.

Emanation is usually spoken of in terms of curie or mache units. A curie is the amount of emanation in equilibrium with one gram of radium element. A mache unit is 4.5x10-10 curies, or by calculation we find 1000 mache units are approximately the amount of emanation in equilibrium with 1/2000 mgr. of radium element. It therefore is estimated that the emanation from one milligram of radium in one month would equal one millicurie or 2,700,000 mache units, or in one day about 1/6 of a millicurie, equivalent to 400,000 mache units.

Insoluble salts, or salts incorporated in some other substance are only about 5% efficient, so that one milligram of this form would produce 80,000 mache units a day. Therefore, it can be seen that to collect sufficient emanation from an insoluble salt, on account of its inefficiency would require a considerable quantity of radium element and the collection of the emanation in a form for internal administration from salts in solution necessitates rather elaborate equipment, as well as skilled assistance.

### Internal Administration.

Radium may be used internally either by the administration orally or intravenously of the soluble salts in solution or by administration of the emanation. The emanation may be administered as an inhalation, when proper appliances are available, or in the form of drinking waters or intravenously.

The quantity of radium administered internally varies from 5 to 300 micrograms or its equivalent, given at suitable intervals and subject to the same variations as other therapeutic agents.

Due to the rapid disintegration of the emanation, which is as stated onehalf in 3.85 days, it must be promptly administered. The waters of a large number of natural springs have been found to be radio-active. This is due to the emanation in solution, acquired during the passage of the water over radio-active substances in its subterranean channels. Only a few of these waters contains sufficient emanation to be of therapeutic value, even though consumed at their source, and due to the rapid disintegration of the emanation are of no value after a few days' time has elapsed.

Radium taken internally acts by increasing the rapidity of the tissue oxidation and by increasing the activity of all ferments, consequently metabolic interchange is more rapid and elimination of waste products more complete. It has been shown that the blood vessels of the periphery dilate under its influence without any weakening of the heart action and with a consequent reduction of the blood pressure. There also results an increase of the amount of haemoglobin and the number of erythocytes, while the leucocytes are diminished.

Radium has proven very beneficial in producing a marked and permanent reduction of blood pressure, with relief of the attending symptoms. In one case under my observation over one year, the blood pressure was reduced from 210 to 160 and has not since been over 170. There was marked improvement in the general condition of this patient. Other more recent cases have shown a satisfactory reduction of blood pressure and general improvement.

Bissell, and numerous other observers report very favorable results in the treatment of various forms of subacute and chronic arthritis. According to Rountree and Baetjer, "The value of radium is unquestionably established in chronic and sub-acute arthritis of all kinds (luetic and tuberculous excepted) acute, sub-acute and chronic joint and muscular rheumatism (so called) in gout, sciatica, neuralgia, polyneuritis, lumbago and the lancinating pain of tabes."

Tracey,3 from a study of a large number of cases, of rheumatism and gout, collected from various sources, reports over 80% were benefited or cured. Splendid results have also been reported from the internal use of radium in various forms of chronic arthritis, gout and similar conditions by numerous observers. For the reduction of high blood pressure, radium is undoubtedly a very valuable agent.

Judging from the results thus far achieved, we have reason to believe that the internal administration of radium offers great possibilities in the treatment of the above conditions, frequently resistant to other methods of treatment.

### Local Application of Radium.

Radium may be used in the form of its salts, or the emanation may be employed. The salts are more commonly used and are usually contained in a hermetically sealed glass tube or fixed over the surface of a flat applicator. Small amounts do not permit of proper screening to give the penetration necessary in many cases nor will longer application of smaller quantities produce the same effect as larger amounts properly screened. An insufficient amount

may stimulate rather than retard cell growth. Much less than 100 milligrams of radium element in the form of a salt cannot be divided into containers of sufficient number and radio-activity as to permit of the proper dosage and technique of application. Rarely are single applications of more than 100 milligrams desirable. Many disappointments in Radium Therapy have resulted from the use of insufficient quantities. The therapeutic effect of a given quantity of radium may be modified by the length of application, intervals between applications, cross-fire, distance screening.

By screening we mean the interposition between the radium and the area treated of some substances. Various metals, such as lead, brass, gold, silver and platinum are commonly used. By the use of appropriate screens, it is possible to modify both the quality and quantity of the rays employed. The small size of the containers, whether using salts or emanation is such that it is usually possible to bring the radium into intimate contact with the tissue to be treated or to place it within cavities.

Unfortunately, there are no fixed rules or dosage for the application of radium. Success with radium, as with any therapeutic agent will necessarily depend not only on a thorough understanding of the pathology of the condition to be treated, but upon the skill and judgment of the surgeon applying it.

### Histological Action of the Rays.

The effect produced by the rays of radium upon the tissues will depend upon the histological characteristics of the tissue treated and the quantity and quality of the rays employed. Tissues differ in their susceptibility to the rays. Certain pathological conditions, such as keloid, angioma and round cell sarcoma, respond in a way that may be appropriately termed specific. Following the application of radium there occurs cer-

tain changes within the tissues and cells that is called reaction. This reaction is necessary for curative effect. Microscopical changes may occur in a few hours or days, while macroscopical changes may not be evident for one or two weeks. This reaction is not necessarily destructive. Disintegration and absorption of morbid tissues may occur without necrotic or inflammatory destruction. It does not in any way resemble the effect produced by cautery, caustics or similar agents. The histological changes occurring in morbid tissues varies considerably with the type of cell comprising the tumor.

In sarcoma, the size of the body and the nuclei of the large cells decrease, the neoplastic elements elongate and they eventually assume the form of large embryonic tissue cells. The cell mass assumes the character of myxomatous tissue and finally results in a tissue resembling fibroma. In epitheliomata and carcinomata under the influence of the rays, the cells diminish in size and staining properties and are absorbed. They disappear either by means of progressive absorption of the protoplasm and nuclei, through leukocytic infiltration or by a sort of granular degeneration. Other processes associated with the development of epitheliomatous tumors are arrested while the vascular connective tissue is reorganized according to the method just described. The endothelium of blood vessels is extremely sensitive to the rays and with moderate doses swells enormously, causing the obliteration of the vessel.

### Therapeutic Application.

Soon after the discovery and separation of radium in 1900 by Madame Curie and her husband, Dr. Danlos, physician to St. Luke's Hospital in Paris, employed it in the treatment of tubercular conditions of the skin.

Dr. Wickham soon after undertook its use on a much larger scale and there was established the Paris Institute or Laboratory. In Europe its value and scope as a therapeutic agent has made continuous progress.

The pioneer in Radium Therapy in the United States was Dr. Abbe of New York, who in 1905 began its use and due to his ability and conservatism, we have received much valuable information as to its application and use. Other workers, notably Kelly and Burnham, Janeway, Newcomet, Simpson, Schmidt, Quigley and others, have done much to promote our knowledge and extend the scope of Radium Therapy.

While by no means a cure all, radium has a definite field as a therapeutic agent and results are accomplished by the proper application of sufficient quantities in appropriate cases, that cannot be equaled by any other therapeutic agent.

Among the superficial conditions which respond most favorably to radium, I would mention "keloid," in which it acts as a specific, the growth disappearing rapidly, without any inflammatory reaction. Recent scars and cicatrices are favorably influenced, resulting in a soft, smooth and pliable fibrous tissue which does not contract in any way.

Papillomata of the skin and vocal chords respond very favorably to its use. Birth marks, port wine stains, superficial and capillary naevi are more favorably influenced than by any other agent. Cavernous naevi respond most favorably. Hairy moles, pigmented moles and similar conditions of the skin are very favorably influenced, and when covering a large area, unexcelled results can be accomplished by the use of radium. Lupus-erythematoms, sycosis, acne roscae and chronic eczema, which have resisted other treatment, have been cured by radium.

Tuberculosis of the skin responds most favorably. Tubercular laryngitis is very favorably influenced when radium is used in conjunction with proper general treatment, and tubercular glands are frequently caused to disappear without sloughing or inflammatory reaction and seldom recur.

In the treatment of angiomata, deep and superficial, no therapeutic agent compares in efficiency of results obtained with radium. Spring catarrh, an inflammatory condition of the conjunctiva, most resistant to other treatment, responds very favorably to Radium Therapy. Rhinophima or bottle nose is caused to resume almost a normal condition.

Exophthalmic goiter is favorably influenced in a large percentage of cases, and I have observed marked decrease in the size of the tumor and relief of the symptoms.

Menorrhagia and metorhagia especially when associated with uterine fibroid, are promptly relieved, when a sufficient quantity of radium is properly employed. Rausohoff, Abbe, Kelly and Burnham, Kronig and others, report marked decrease or disappearance of the tumor with the relief of symptoms in over 95% of the cases of uncomplicated uterine fibroid, treated, and in my personal experience, I have obtained very pleasing results.

Enlarged and hypertrophied prostates of old men are very favorably influenced and especially in cases where the operative risk is great, I believe radium should be first tried.

Basal cell epithelomata, by far the most frequent type of skin cancer, can, even though the local destruction is great, when metastisis has not occurred, be permanently cured in practically every case. The cosmetic result is far superior to that attained by any other agent.

Epithelomata of the lip has equally good results when glandular evolvement is absent and in advanced cases there results healing of the primary growth, with occasional disappearance of the glandular deposits.

In epithelomata of the floor of the mouth, buccal mucous membrane, tonsils, faces, palate, oesophagus and cervix, pharynx and larynx, marked relief is obtained and not infrequently cures are effected. Unfortunately, cancer of the tongue is cured only in a small percentage of cases, though marked relief may be obtained. However, better results are not obtained by any other method of treatment.

In the \*treatment of cancer, radium has proven of untold value. No doubt, if it were possible to excise all cancer cells, a cure of cancer by surgical measures would be most satisfactory; however, it is the failure to do so that makes recurrence so frequent following operative procedure.

Radium may be used independently, before operation to render certain cancerous conditions operable, in inoperable and in recurrent cases.

Inoperable and recurrent carcinoma when accessible, as of the breast, oesophagus, vagina, prostate, rectum, bladder, uterus and elsewhere, is more favorably influenced by sufficient quantities of radium properly applied, than with any other therapeutic agents.

Time will not permit of a detailed discussion of the value of radium in the treatment of cancer, but I cannot refrain from referring to the most excellent results obtained in the treatment of recurrent and inoperable carcinoma of the uterus.

Schmidt,<sup>8</sup> Kelly and Burnam,<sup>9</sup> and Degrais<sup>10</sup> and numerous other observers, whose experience extends over a sufficient time to be of scientific value, report clinical cures in over 25% of these cases. I have been very much impressed with the relief obtained in nearly all cases. The pain, hemorrhage, and discharge is stopped or markedly decreased and life is prolonged in a very large percentage of cases treated. In fact, I would say that no case of

carcinomata uteri should be considered absolutely hopeless until radium has been tried.

Sarcoma of the round cell type, even in its very rapid and malignant forms, is one of the growths that responds most favorably to radium. I have seen immense tumors shrink down rapidly under the influence of the rays and where it is possible to reach the outlying microscopical deposits, many cases can be cured.

Spindle cell sarcoma also respond favorably, while other types of sarcoma respond about the same as carcinoma.

Lymphadenoma and lymphocarcoma are susceptible to radiation and when localized are far better treated than by operative removal, inasmuch as recurrence following surgical intervention almost always occurs.

I regret that the time has not permitted me to discuss more scientifically and in detail the action of radium and its scope as a therapeutic agent. It has been my object to give you some idea of what radium is, to mention some of its chemical and physical properties, as well as its histological influence upon certain tissues and to mention some of those conditions in which it has proven its superior value as a therapeutic agent.

Suite 805 I. N. Van Nuys Bldg., Los Angeles, Cal.

#### BIBLIOGRAPHY.

1—Bissell. Medical Record, Vol. LXXXVI, No. 11, July 11, 1914.

2—Rountree and Baetjer. Journal A. M. A., Oct. 18, 1913.

3—Tracey. N. Y. Medical Journal, Vol. CL, No. 18.

4—J. & J. T. Baushoff-Lancet Clinic, 1916, Vol. CXV, 116.

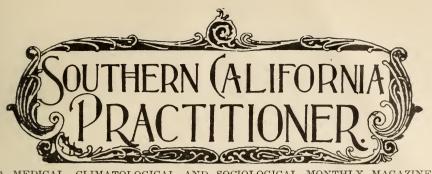
5—R. Abbe. Medical Record, July 8, 1916.
6—Kelly and Burnam. Journal American Medical Assn., 1914, XXIII, 622.

7—Kronig. American Journal Obst., N. Y., 1914, LXIX, 205.

8—Schmidt, H. Surg. Gynecology & Obst., Vol. XXIII, 191, Aug., 1916.

9-Kelly and Burnam. Jour. Amer. Med. Assn., 1915, LXV, 1874.

10—Degrais, P. Ann. de gyne'c. et d' obst., 1915, XI, 609.



A MEDICAL, CLIMATOLOGICAL AND SOCIOLOGICAL MONTHLY MAGAZINE.

This journal endeavors to mirror the progress of the profession of California and Arizona.

Established in 1886 by Walter Lindley, M.D., LL.D. DR. GEORGE E. MALSBARY, Editor and Publisher.

Associate Editors,

Dr. Walter Lindley, Dr. W. W. Watkins, Dr. Ross Moore, Dr. George L. Cole,
Dr. Cecil E. Reynolds, Dr. William A. Edwards, Dr. Andrew W. Morton,
Dr. H. D'Arcy Power, Dr. B. J. O'Neill, Dr. Otto G. Wicherski,
Dr. Charles H. Whitman, Dr. Edward T. Dillon, Dr. C. G.
Stivers, Dr. Boardman Reed, Dr. W. H. Dudley,
Dr. J. M. Mathews, Dr. A. J. Cook.

Address all communications and manuscripts to
EDITOR SOUTHERN CALIFORNIA PRACTITIONER,
Subscription Price, per annum, \$2.00. 500 Auditorium Building, Los Angeles, Cal.

### **EDITORIAL**

## LOS ANGELES AS A HEALTH RESORT.

We have always believed in the efficiency of the Health Department of Los Angeles under the direction of Health Commissioner Dr. L. M. Powers, but were not prepared for the following very encouraging report telegraphed from Chicago to the Los Angeles Times a few days ago:

Los Angeles has the lowest death rate of any city in the United States of more than 500,000 population, while Chicago ranks third, showing a marked decrease in tuberculosis and typhoid fever.

Dr. John Dill Robertson, commissioner of health, today made his annual report to Mayor Thompson. He prefaced this by remarking on the good record Chicago made last year, as compared with previous years or with other cities.

In 1916 the total death rate from tuberculosis in Chicago was 3736, as compared with 4169 fatalities in 1915. On the basis of 100,000 population, there were 5.16 persons who had typhoid fever in 1916 and 5.40 in 1915. The total of deaths from typhoid fever in the decade 1907-1916 was 12 out of each 100,000 population.

A table of the larger cities in the United States and the order of their death rate records for 1916, computed on the basis of 100,000 population, follows:

Los Angeles
New York14.58
Chicago14.82
St. Louis
Philadelphia16.14
Boston16.70
Pittsburgh17.40
Baltimore
Detroit19.17

"This record is the more remarkable," said Dr. Robertson, "when it is considered how many hot days there were in Chicago last summer. There was an excess in temperature for the year of 1.7 deg."

## EDITORIAL NOTES

Dr. Phill Böller has located in the Los Angeles Investment Building.

Dr. T. M. McNamara has been elected Health Officer of Kern County.

Dr. John H. Barrow has taken offices in the Los Angeles Investment Building.

Dr. Henry Snure has opened clinical and X-Ray Laboratories in the Doctors' Office Building, corner of Fifteenth and Figueroa.

Dr. C. L. Downey after practicing in Carpenteria for fifteen years died at his home December nineteenth of cancer. He was seventy-one.

The upholding of the California State Medical Law by the Supreme Court of the United States was a wellmerited blow to the chiropractors.

We have received an interesting reprint, "A Simple Apparatus for the Treatment of Incipient Hip Joint Disease," by Dr. Grant Gould Speer of Los Angeles.

Dr. Tom M. Burney, aged twenty-seven, died in Los Angeles recently from tuberculosis. He was a fine young man, a graduate of the University of Pennsylvania.

Modern Hospital for January says twelve per cent of the sick people who are ill enough to need a doctor are cared for in the hospitals and about eighty-eight per cent in their homes.

Dr. Henry Sherry of Pasadena has recently returned from a trip east. During his absence he visited his son who for several years has been an associate in surgery with Dr. Crile.

Dr. Placida Gardner a very handsome young lady graduate of the Medical Department of the University of Southern California, has been appointed by Health Commissioner Powers as City Bacteriologist at a salary of \$200 per month.

Dr. F. W. Hatch, California's pioneer alienist, has been reappointed general superintendent of state hospitals. Dr. Hatch's term expired March 18, 1913 and he has been waiting all this time for his successor to be appointed He has been with the State Lunacy Commission for sixteen years.

Dr. Joseph Kurtz has the profound sympathy of his fellow practitioners upon the death of his beloved wife who had been his companion for over a half a century. She was an ideal woman, and besides her husband, leaves mourning children and grandchildren. Among the former is the well known surgeon Dr. Carl Kurtz.

Dr. Maude Mackey, furloughed missionary from North China, is visiting relatives in Los Angeles.

Dr. Mackey first graduated in nursing at the California Hospital and then took the degree of M.D. in the Medical Department of the University of Southern California.

She has a well organized hospital in Paotingfu in which she is sole surgeon as well as superintendent of nurses. She was the honored at a gathering of congenial spirits at the home of Dr. Kate Wilde, 747 Crocker Street, the Thursday between Christmas and New Years.

Dr. I. N. Magee was recently elected president of the Bay District (Venice, Ocean Park and Santa Monica) branch of the Los Angeles County Medical Association. Other officers chosen were: Dr. Oscar Anderson of Ocean Park, vice-president; Dr. E. N. Reed of

Santa Monica, secretary-treasurer and Dr. G. A. Fielding of Sawtelle, councillor to the county society.

The annual banquet of the Phi Chi Medical fraternity, U. S. C. college of physicians and surgeons, was given December twentieth at Hotel Clark. Dr. Lyle C. McNeily presided as toastmaster and Dr. G. S. Smith as chairman of the arrangements committee. Among the speakers were Dr. J. M. Lacey of the county hospital, Dr. J. H. Seymore and Dr. E. L. Wagner.

E. W. Scripps of San Diego has announced that he will give \$250,000 for the establishment of a clinic to be known as "The San Diego Diagnostic Group Clinic on the John P. Scripps Memorial Foundation." It will include "The John P. Scripps Memorial Hospital for Working Men and Women." Nothing could inspire more confidence in the success of this noble enterprise than the fact that Dr. F. R. Burnham is one of the chief trustees.

Dr. Harry J. Crayeroft was elected president and Dr. Kenneth J. Stanniford was re-elected secretary of the Fresno County Medical Society at the regular monthly meeting on the evening of January second. Dr. J. Wilson Shiels, San Francisco surgeon, contributed a paper, which was followed by discussion. Dr. Guy Manson was host of the evening.

Dr. S. Adolphus Knopf, of New York, is the author of a reprint just at hand entitled, Woman's Duty in the Anti-Tuberculosis Crusade. It is an interesting paper. Another paper by the same author is on Birth Control. In conclusion Dr. Knopf says:

"I believe in birth control, that is to say, birth limitation, based on medical, sanitary, ethical, moral and economical reasons. I believe in it because with the aid of it man and woman can decide when to have a child, work and prepare for its arrival, welcome it as the fulfilment of their hearts' desire, watch over it, tenderly care for and educate it and raise it to be what every child should be—a being happy, healthy, strong in mind, bcdy and soul."

Physicians desiring copies of these papers should address the author, 16 West 95th Street, New York City.

## **BOOK REVIEWS**

GERIATRICS. The Diseases of Old Age and Their Treatment, including Physiological Old Age, Home and Institutional Care, and Medicolegal Relations. By I. L. Nascher, M.D., Chief of Clinic Department of Internal Medicine, Mount Sinai Hospital Dispensary, New York; Formerly Special Lecturer on Geriatrics, Fordham University School of Medicine. With an introduction by A. Jacobi, M.D. Second edition, revised with 50 plates containing 81 illustrations. Philadelphia: P. Blakiston's Son & Co. Price \$5.00 net.

The basic proposition that "Senility is a physiological entity analogous to childhood and not a pathological state of maturity," has been questioned on the grounds that there is no senile from and no point at which we can

fix the beginning of the senile state. All anatomical and physiological standards are based upon averages, drawn in some cases from widely separated normal limits. In childhood we fix standards year by year. We could, in the same manner, fix yearly norms in old age although the limits would be more separated as some age sooner than others. And just as we fix the limit of childhood at puberty, although the period of development continues until the third decade, we can fix the beginning of old age at menopause and male critical period, although some

organs begin to degenerate before this time. The basic proposition is being accepted by those who have given thought to the subject and who realize that in dealing with senile diseases the object must be to restore the organism to the normal senile state and not to the normal state of maturity. In this edition typographical and

other errors have been corrected, some changes were made to bring the work up to date and a chapter on "Surgical Procedure in Senile Cases" has been added. The appearance of this edition is but another evidence of the ability and success of Nascher in popularizing both the term and study of "Geriatrics."

### **MISCELLANEOUS**

### MEETING OF THE EYE AND EAR SECTION OF THE LOS ANGELES COUNTY MEDICAL ASSO-CIATION, DEC. 4, 1916.

Dr. Grant Selfridge read a paper entitled "Demonstration of Intra-Nasal Cosmetic Surgery," with colored lantern slides. He said in part that the correction of nasal deformities was of great importance both from a cosmetic and physiological standpoint. All his work had been done intra-nasally and he had utilized bone and cartilage grafts, sometimes from the septum and sometimes from the rib and scapula. The first incision is made inside the nostril between the skin and mucous membrane and outer surface. He separates freely all tissues up to the frontal bone. The graft of bone and cartilage should be removed by an assistant, and its removal timed to arrive when the nose is ready for it, so as to avoid curling up of the edges. For this reason, the graft should never be put in a salt solution as it causes curling. Over correction is not a fault to be avoided as there is considerable shrinkage in the tissues. After the operation the bone and cartilage graft should be split and the medullary substance removed. Periosteum and perichondrium should be preserved as the graft will be more apt to grow in its new location with the natural covering than without. Sutures are often used in the nose and serve to hold the graft in place. Photographs of the nose are made both in profile and full face and radiographs are used to show the result of the grafting. The external dressing should receive special care. The application of adhesive straps past from one side of the nose to the other and around the tip of the nose serve to preserve the shape. Intra-nasal splints are not used, but an external splint of tablefelt soaked in silicate of soda serves to keep the nose in position. Syphilitic patients should not be operated upon as the bones are already diseased and liable to undergo further change. The very large noses of the Hebrew type may be made smaller by removing a section of the septum, and collapsed alae may be corrected by grafting or in case of excessive tissue by taking out a buttonhole section and bringing the edges together and applying sutures.

Discussion of Dr. Selfridge's paper. Dr. Kyle: I have tried this work in several cases, and I am very glad Dr. Selfridge is doing the work and doing it so well. In regard to the X-Ray, it is very valuable as a means of diagnosis and I use it frequently. One interesting case I had was saved from a mastoid operation by having an X-Ray picture taken. It showed no mastoid involvement so no operation was done. Stereoscopic pictures are valuable especially in sinus work. One can tell if

ous is present and its level or whether polypoid degeneration exists.

Dr. Hastings: I was very much interested in both papers. I had almost formed the opinion that puncture was all that was needed to make a diagnosis, but I find in ethmoid and sphenoid work stereoscopic radiography has been very satisfactory and is the coming method. In the ethmoid it will show now wide and how deep the ethmoid abyrinth is for operating. We are greatly indebted to Dr. Selfridge and Dr. Cambert for coming here to demonstrate these valuable methods to us.

Dr. Stivers: How young can chillren be operated on?

Dr. Selfridge stated in answering that it was necessary to preserve the triangular cartilage in children, so he removes very little except when it is thickened high up in the ethmoid region. After 7 years of age, he makes the usual incision on one side, separates all the mucous membrane and tissues down to the bone and removes the excess of cartilage. Dislocation of the columnar cartilage is treated the same as in adults.

Dr. Selfridge in closing said if he ived long enough he wanted to come again and give a talk on hay-fever, which is a hobby of his. He has recently, with Dr. Scheppergrell and Dr. Hall, been tabulating the various weeds and Compositae of California.

Dr. Edward G. Cambert, roentgenologist of the Southern Pacific General Hospital of San Francisco, gave an interesting talk on stereoscopic X-Ray pictures. He showed many interesting views of the sinuses.

The society extended a rising vote of thanks to the visitors.

Dr. Hosmer of San Diego was elected an associate member.

The secretary requested members to notify him by letter the exact wording of their specialty for the coming new list of members to be printed in the Constitution and By-Laws which are now being written.

Meeting adjourned for refreshments.

## OBSTIPATION FOLLOWING OPERATION.

There are many theoretical reasons why Interol should be of value to the post-operatively constipated patient. But the best reason is that it IS of value.

And the most gratifying thing about it is that in most cases while at first, the patient may need as much as 3I to 3ISS of Interol per day, with time he can diminish the dosage to as little as half an ounce a day, or an ounce every other day, and even discontinue Interel for periods of time.

In many cases Interol is the last resort to avoid another use of the surgeon's krife.

#### TWO STRENGTHS OF PITUITRIN.

As is well known to medical practitioners, Parke, Davis & Co. have for several years manufactured a standard pituitary extract under the name of "Pituitrin." The product is prepared from the posterior lobe of the pituitary gland and has come into extensive use in the treatment of delayed parturition or uterine inertia. Being specifically intended for use in obstetrical work, this preparation will hereafter be designated, in label and literature, as I ituitrin "O" (Pituitrin obstetrical).

Announcement is now made of a second preparation of the pituitary gland, to be known as Pituitrin "S" (Pituitrin surgical). This product is approximately twice the strength of the former and is indicated specifically in the treatment of post-operative intestinal paresis, vesical atony, hem-

orrhage and shock. Because of its exceptional potency it should not be used in obstetrical practice. In order that it may be readily distinguished from Pituitrin "O" (obstetrical) the carton labels are printed with red letters on white paper.

Both Pituitrin "O" and Pituitrin "S" are physiologically tested for activity.

Pituitrin "O" is supplied in ampoules of 1 mil (1 Cc.) and ½ mil (½ Cc.), respectively, and in bottles of ½ ounce. Pituitrin "S" is supplied in ampoules of 1 mil (1 Cc.) only.

### PHYLACOGENS IN SMALL BULBS.

Formerly the six preparations constituting the Phylacogen line were supplied in 10 mil (10 Cc.) bulbs only. A considerable demand has developed for a smaller package. To meet it the manufacturers (Parke, Davis & ('o.) announce the addition of a 1 mil (1 Cc.) bulb. Each bulb is enclosed in a pasteboard carton and is accompanied by a descriptive circular. These small bulbs are marketed in packages of five, which enables the druggist to supply the physician with one to five bulbs, as may be wanted. The 10 mil bulbs, in individual cartons, will be marketed as heretofore. It is confidently believed that the two packages now furnished will meet every demand of the medical profession.

# X-Ray Laboratory

Special attention paid to

Radiography of the Chest and Gastro-Intestinal Tract

X-RAY DEPARTMENT of the CALIFORNIA HOSPITAL





## RADIUM SULPHUR SPRINGS NATURAL RADIO-ACTIVE MINERAL WATER It Sparkles and Foams Like Champagne

Hot Baths and Treatments cure Rheumatism, Sciatica, Neuritis, Paralysis, Locomotor Ataxia, Poor Circulation, Heart, Stomach, Liver, Kidney, Diabetes, Bright's, Blood and Nervous Diseases, Female Troubles. Doctor's advice free. Water delivered. Send for Booklet.

Melrose Ave. Cars Direct to Springs, Los Angeles



PRACTITIONER \$2.00 PER YEAR

500 Auditorium Building, Los Angeles





ol. XXXII.

LOS ANGELES, FEBRUARY, 1917

No. 2

Editor.

DR. GEO. E. MALSBARY.

Associate Editors,

Dr. Walter Lindley, Dr. W. W. Watkins, Dr. Ross Moore, Dr. George L. Cole, Dr. Cecil E. Reynolds, Dr. William A. Edwards, Dr. Andrew W. Morton, Dr. H. D'Arcy Power, Dr. B. J. O'Neill, Dr. Otto G. Wicherski, Dr. Charles H. Whitman, Dr. Edward T. Dillon, Dr. C. G. Stivers, Dr. Boardman Reed, Dr. W. H. Dudley, Dr. J. M. Mathews, Dr. A. J. Cook.

## MALIGNANT DISEASE OF THE UTERUS.\*

BY DR. W. O. HENRY, F.A.C.S.

1. General remarks on the broad subect of cancer. It is estimated that
% of all deaths in the United States
fter the age of thirty are from caner. In England one man out of every
leven and one woman out of every
ight who reach the age of thirty-five
ears die of cancer. The table given
by Janeway shows that the death rate
from cancer for each ten thousand
habitants in Switzerland is 12.5; in
France, 10; in England, 9.08; in United
States, 7.06; in Austria, 7.5; in Germany, 7.45; in Japan, 5.3.

As to whether or not cancer is on he increase there is some difference of pinion. W. R. Williams, in a review of the question, states that there has been a steady yearly increase of from to 5% during the last twenty or hirty years. The statistics of the Widow's Life Insurance Co. and of the German Life Insurance Co. both show a steady increase of the disease. Louis L. Dublin, Ph.D. who is statistician for he Metropolitan Life Insurance Co.,

gives a very interesting paper before the Academy of Medicine in New York, on the subject, "The Interest of the Community in Cancer." He says, "In the Metropolitan experience there are represented over 10,000,000 persons both white and colored men, women and children of all ages above one year. The number of persons exposed and the corresponding number of deaths are known with a high degree of accuracy. The rates have futhermore the particular value of applying to the working classes of the United States and Canada. Additional interest results from the disquieting fact that the cancer rate may be increasing. The chief sources of information on their face indicate an increase. This holds true not only for the registration area of the United States and for those of our state whose records are most reliable; but also for the United Kingdom, for Switzerland, for Germany and indeed generally throughout the civilized world. My own judgment is that there may very well

<sup>\*</sup>Read before the Los Angeles County Medical Society, January, 1917.

be an increase. We shall have to wait at least ten years under present conditions of registration in our country to know definitely what has happened. There are already indications that the cancer rate has reached its highest point, and that in certain communities it is beginning to decline. It has often been said that cancer is a disease of the well to do. If our figures show anything it is that the industrial classes enjoy no advantage. Be that as it may we can distinctly state that no large groups in the community enjoy any special immunity. I have found that there is little to justify assertions which have been made in the literature that certain of the races enjoy especial or partial immunity. The Jews for example liave been singled out in this respect. As a matter of fact the rate for Jews is sometimes higher than, for the native born American of the conresponding age periods. A writer has said, "At the present time a conservative estimate places the total rumber of cancer deaths in the United States at 80,000 a year." The United States Bureau Census for 1915, which was 63 per one hundred thousand in 1900, shows 81.1. Frief reporting the very accurate statistics of Breslau there has been a slight increase, but that the percentage of increase has not changed in nineteen years. While cancer of the gastro-intestinal tract has increased in frequency, there has been no increase in cancer of the breast or uterus. Bashford of England has also shown that cancer of the uterus is diminishing instead of increasing, while that of the gastro-intestinal tract is increasing. In a book entitled "The Mortality From Cancer Throughout The World," by Fredrick L. Hoffman, Statistician to the Prudential Insurance Company of America we find these words: "Practically all forms of cancer are on the increase." The evidence of cancer increase throughout the world is an incontrovertible statistical fact

and that cancer frequency decreases with diminishing distances from the Equator. Among his suggestions to the American Gynecological Society for the national control of cancer he urges the necessity for, "organizing an American Society for the purpose of educating the public as to the importance of early operation, for the further study of occupational influences, for dietary studies, for coordinated work with the Department of Agriculture in studying the incidences of the disease in the lower animals and plants." Without going further into the details of the question, I think that we may fairly assume that malignant disease in general is on the increase.

Etiology. When we come to speak of the cause or causes of malignant disease we must admit that we have not yet arrived at a satisfactory answer.

Since however cancer is known to occur in the vegetable kingdom and in animal life lower than that of man; and since it is distributed throughout the world somewhat according to the race and the country, and since various types of malignant disease occur at different ages in the human species; and since certain organs of the body frequently affected than more others; and whilst the disease is not transmissable by heredity yet it seems to be true that certain exciting causes will produce the disease in some people with a given heredity while they will not in others; and finally since occupation, sex and diet do seem to have a positive influence upon its development; therefore we have some data upon which to base an etiology.

To illustrate, it is claimed that cancer occurs more frequently in the higher walks of life than in the lower. All elaborate statistics seem to confirm this opinion. And yet the disease occurs among the uncivilized. Then too, the carefully prepared table given by McConnell of 17,296 cases showing the location of cancer in two races

brings out the fact that of the whole number 6233 were white males and 155 black males; while 10,525 were white females and 383 were black females. In this collection there were 2140 white males, 1964 white females, 55 colored males and 61 colored females who had cancer of the stomach: while cancer of the head, face, mouth and neck was present in 1018 cases, of males, there were only 399 cases of cancer among the females limited to these same regions. Levin has shown that whilst cancer is very rare among the American Indians, nevertheless it does occur. Baelz, who has made a very careful investigation of the question of cancer in Japan says, without doubt cancer is much rarer in Japan than Europe.

And the correctness of this opinion is demonstrated by the relatively large number of cases which occur among the small number of European inhabitants in Japan as contrasted with the rarity with which the disease is observed among the natives themselves." Then too, that cancer is much more frequent among woman than men is shown by the tables of Buday. In which it appears that in the United States for every one hundred cases among men there are a hundred and seventy one cases among women.

In Sweden there are 153, in England 147, in Italy 127, in Austria 121, in Germany 123, in Hungary 124, while in Switzerland there are 100.2 to every 100 cases among men.

As to heredity whilst the case of Madam Z seems to lend very strong support to the believers in the theory of hereditary transmission; because, of her 26 decendants 15 had cancer that is one of 7 males and 14 of 19 females; yet Bashford has shown that in England at least there is no evidence that heredity plays a part. Yet in his report he does say, "Precise evidence is advanced of the existence of a heredi-

tary predisposition to the development of spontaneous cancer."

As to the exciting cause of cancer in general the profession has believed that there has been a connection between trauma and the development of the disease. Whilst it is true that a few men deny there being any relationship yet I believe the concensus of opinion is in harmony with the conclusion of Colev who holds "that a local trauma of any kind from chronic irritation to a single contusion is frequently the exciting cause of malignant tumors of all types. That a single local injury may be the cause of a carcinoma or sarcoma is no longer questioned. Wilson and Willis subjected 570 cases of cancer in different parts of the body to careful microscopic examination to obtain information as to the starting point of the growth and concluded that a very large percentage of them had been preceded, by chronic inflammation, as a probable exciting cause.

Janeway says, "the excessive frequency of cancer in the mouth among Indians and Ceylonese women is accounted for by the irritation produced by the chewing of betel nut, just as the striking contrast between cancer of the lip, tongue and cheek in English men and women is directly due to the use of tobacco by the former."

He says futher, "these facts are important because we may almost say that in them we have control experiments, demonstrating the direct connection between chronic irritation and the incidence of cancer. Less marked evidence of the same facts, but still of very great importance, is the frequency with which cancer of the stomach is preceded by ulcer; cancer of the biliary passages by the history of chronic cholelithiasis; cancer of the breast by mastitis, and cancer of the cervi uteri by the history of cervical laceration and erosions."

His definition seems to be fairly satisfactory and gives a good working basis

for study and investigation. It is as follows, "A malignant neoplasm may be defined as one whose cells exhibit a progressive tendency to invade the neighboring tissues, either singly or in masses, and in them there is no true encapsulation."

Diagnosis. As to the diagnosis special efforts have been made during the past few years to find some clinical test pathognominic of cancer which would render an early diagnosis possible.

The urine and blood have been subjected to various tests to this end by many observers.

The only test however that seems to bid fair to give satisfactory results is the Meiostogmine Reaction. Ascoli and Izar have been working with this test for the past two years and found it to give a positive reaction in 93 out of 100 cases. Numerous other experimenters have followed with equally good results. So that by this test we evidently have an important adjunct in the early diagnosis of all malignant diseases. But whether or not it will prove to be a wholly satisfactory test, time only will tell.

Treatment. When we come to speak of the treatment perhaps Janeway's statement covers the ground briefly and yet fully. For he says, "At the present, however, it must be acknowledged that matters are in a chaotic state, and about the only thing positive in regard to the treatment of cancer is the claim of the surgeons that if treated sufficiently early and sufficiently radically operative treatment affords the only sure means of cure."

Having thus laid a broad foundation by this brief consideration of the malignant diseases in general let us now take up more specifically the malignant diseases of the uterus.

Malignant disease of the uterus constitutes more than one fourth of all the malignant diseases that occur in women. And since malignant disease in general is almost twice as common

in women as in men it must be apparent to all that this form of disease is very widespread, especially in all civilized lands. Then too, the fact that the disease is rather on the increase should stir us to the adoption of every possible measure not only to cure it but to prevent it. Statistics seem to show that the largest number of cases occur between the ages of forty and fifty, the next between thirty and forty, the next between fifty and sixty, then between sixty and seventy and then from twenty to thirty and finally in the extreme of life before twenty and after seventy. In fact Welch's figures of 31,482 cases of primary cancer show, 29.5% were in the uterus.

As to the cause of malignant disease of the uterus little can be added to what has already been said. 1. While it cannot be said to be a hereditary disease there does seem to be ground for believing that there is inherited some constitutional condition which more readily takes on malignancy when the right irritant or trauma occurs than in others.

2. Chronic inflammation or a laceration may be the exciting cause when other conditions are favorable. It may be too that race and diet have some influence in preparing the soil for the development of these growths. For apparently they are not so common in vegetarians as others. And Dr. Boldt reports having examined several thousand Jewish women for disease in the pelvic organs and found malignant disease to be very rare. But while examining a less number of Gentile women he has found cancer to be twenty times as frequent among them as among the Jewish women."

Montgomery says, "Cancer appears so infrequently among the American Indians that it would almost appear they enjoy immunity."

Other observers, however, have found cancer among the Indians and even among barbarous and uncivilized people in general so that we cannot admit absolute immunity for any class or race.

Malignant disease occurs very much more frequently in the cervix than in the body.

Gebhardt and Wilson say that "only about 6% of all uterine cancers begin in the body."

Ferrous and Forget say one in sixteen occurs in the body. Schrader says one in fifty, while Welleck says one in fifty-four.

Of six hundred and eighty-six cases given by different observers, thirteen are credited to the body or not quite two and one half per cent.

Symptoms. When we come to speak of the symptoms I sometimes fear that too many men are waiting for the cardinal symptoms of many years ago. That s, pain, hemorrhage and foul discharge. It is true that these symptoms when present are very suggestive of malignant disease and that they are nearly always present when the disease has reached a certain stage. But alas! when this stage has been reached it is so late in the course of the disease that t matters little whether or not a diagnosis is then made, for the end is not far off.

It becomes us, therefore, to be on our guard and make a diagnosis in the very earliest stages in order to give the patient treatment which may be really curative. It is true that the discussion of this topic in lay journals and magazines has made the more intelligent part of the community quite alert on this subject and this class of cases is coming more quickly for an early diagnosis than formerly.

We cannot emphasize too much the importance of an early diagnosis.

At the present time there are no known symptoms nor clinical tests, nor laboratory findings that will always enable us to make a postive diagnosis in the very beginning of these cases. But that should not deter us from being alert and using every known means to

help in making a correct diagnosis at the earliest possible moment.

And that is why the Meiostogmine reaction seems to be important and why great hopes are being entertained of this or some other blood test proving to be of positive value. It would seem that there is no longer any excuse for a physician saying to a woman who is flowing excessively at the menopause that she is only passing through the change and this excessive flow means nothing and does not require any investigation. For the fact is that excessive flowing about the time of the change of life, either menorrhagia or metrorrhagia, always means something abnormal. Such a case when brought to the attention of a physician should always be investigated sufficiently to exclude beyond the possibility of doubt the beginning of malignancy, or determine its existence. In fact, we should instruct the laity that such flow is always abnormal; it may mean cancer and should be thoroughly investigated.

Again when a woman has passed the change of life and begins to show any unusual vaginal discharge, especially if it be bloody, her case is suspicious and demands a rigid examination. And it is not fair to such a woman for her physician to suggest a simple douche and say that if that doesn't relieve it in a few weeks she may come in for examination. She should be thoroughly examined without delay for this is the period of danger.

In fact, any unusual flow either in time or amount demands investigation but is not quite so imperative in the younger women as it is in those who have arrived about at the menopause or have passed it. Any bloody flow, however slight, produced by intercourse or the use of the douche or from simple digital or specular examination is suspicious and should be investigated at any time of life. In all of the foregoing cases, if the bleeding point can be found and it is shown to be par-

ticularly friable, a section should be taken for microscopical examination, unless it is clearly manifest that malignancy has already begun. Any spot in the vagina, cervix or uterine cavity, which bleeds easily to a gentle touch is likely to be the beginning of malignancy, and the microscope should very clearly help us to settle the question. Here too, the Meiostogmine reaction may be of advantage. Of course in the later stages when the bleeding is profuse and a cauliflower mass surrounds the cervix, or the body is enlarged and n dular the diagnosis is much simpler.

Treatment. In speaking of the treatment we should not forget the preventive measures.

Chronic inflammations should be cured lest this constant irritation in a susceptible individual lead to the development of cancer. The lacerated cervix should be repaired early lest it be the starting point of cancer. The lacerated perineum should be repaired if necessary to prevent procidentia, lest, as sometimes happens, the cervix and vaginal mucus membrane being exposed to the irritation of the thighs and clothing, develops a malignancy. sharp curette should not be used too frequently nor too vigorously lest it be just the irritant required to set up malignancy in a susceptible case. In short the preventive treatment is to prevent, allay or remove all known sources of irritation of whatever character.

If more careful attention were paid to these points we would undoubtedly diminish the occurrence of malignant disease of the uterus far beyond our fondest hopes.

The next most important thing in treatment is to secure these cases for treatment in their very early stages. And to do this the family physician who usually has opportunity to see these cases first should be on the alert to any irregular bleeding from the vagina as heretofore indicated, and have the

case properly investigated at the first sign of disturbance, especially at about the menopause or after the change. He too, it is who should instruct the laity to be on the lookout for any irregular bleeding or discharge from the vagina. The next important thing in the treatment is thorough and wide removal with the knife, or as some prefer, with the cautery. The idea that some seem to have that the Schroeder amputation is sufficient when the disease is just beginning is not tenable, for it has been found that the cancer cells spread too rapidly for this treatment to be effective. Hence total extirpation or a pan-hysterectomy is the only justifiable operation.

As to whether this complete removal shall be by the Wertheim operation or other abdominal operations, or by the vaginal method, there is still some difference of opinion. For one, I do not favor the Wertheim operation.

It is true Wertheim has greatly reduced his primary mortality from the operation and has also raised the percentage of permanent cures, but these two facts are due more to his large experience and expertness in doing the operation and to getting the cases for operation in the very earliest stages, rather than to the fact of the wide extent of removal. And personally I oppose the operation, first, because of its extreme hazard and high mortality; second, because I doubt the need of such wide dissection; third, because in late cases even with such wide dissection recurrence is almost inevitable; fourth, because of the extreme difficulties of the operation, which apparently is unnecessary.

On the other hand I object to the vaginal operation on the ground that unless the body alone is affected and in its early stages the vaginal operation is hardly radical enough. Hence as a rule, I think the wide extirpation by the abdominal route is the opera-

tion of choice. Or the combined abdomino-vaginal operation.

Those cases of malignant disease clearly inoperable should only be treated by palliative measures and total extirpation should not be attempted, for such operation will greatly increase the immediate mortality and hasten recurrence and widespread infection. Such cases may often be temporarily benefited, made more comfortable and life prolonged by a thorough currettement and free use of the actual cautery. The use of the X-ray and Radium are also of great benefit in some cases, as well as Percy's method.

Aubert believes with many others, that radium is a useful palliative in inoperable, and as an adjunct to thorough surgical measures. And Degrais says that inoperable cancer always derives some benefit from the radium exposures. It seems to be true that both the X-ray and radium treatment following radical operation have some value in preventing the recurrence of the disease.

As to the non-surgical treatment very little need be said, for while diet and hygiene, drugs and caustics of all kinds as well as organotherapy serum vaccines have been resorted to, nothing has yet been accomplished to lead us to abandon surgical measures or relax our effort in getting a patient to submit to early radical operation as the only means of a satisfactory cure.

In my desire to get at the consensus of opinion of leaders in the United States and thus draw authoritative and practical up-to-date conclusions on the problem of malignant disease of the uterus in the United States, I wrote to surgeons and gynecologists in different parts of the country and asked a series of questions to which they responded very courteously, promptly and fully; for which I desire at this time to express my thanks and appreciation.

To question 1. In your opinion is

malignant disease of the uterus on the increase in the United States, I had the following answers: Dr. Herman J. Boldt, Dr. J. M. Baldy, answered No; Drs. Robert T. Morris and J. B. Deaver answered Yes; Drs. E. E. Montgomery and A. J. Ochsner were doubtful, while Drs. Howard A. Kelly and T. S. Cullen said we do not know; and Dr. W. J. Mayo would not express an opinion.

To question 2. How may it best be prevented, Drs. Boldt, Montgomery, Ochsner and Deaver practically agreed in saying, by repairing lacerations of the cervix and removing all sources of irritation; Cullen and Baldy say they do not know; Kelly says by early recognition and proper treatment; Morris says by improving the physical condition of women, while Mayo says by education of the public and rigid examination by the physician.

To question 3. What is the best curative treatment in operable cases, Boldt, Morris, Kelly, Baldy, Montgomery, Mayo, Ochsner, Cullen and Deaver all say radical operation and complete removal.

To question 4. When complete removal seems possible should the Wertheim operation be done, Boldt, Kelly, Baldy and Cullen say Yes; Montgomery, Ochsner, Morris and Deaver say No, while Mayo says Yes in selected cases of cervical carcinoma.

To question 5. If a pan-hysterectomy is to be done, but not the Wertheim operation, should the electric knife be used, Boldt, Morris, Baldy, Montgomery, Mayo, Cullen and Deaver say No; Ochsner says Yes, and Kelly did not answer.

To question 6. Is the use of the X-ray or radium a real curative measure in some cases? Which one? Boldt, Baldy, Montgomery say No; Kelly says Yes; Morris says both in a small proportion of cases; Ochsuer, Cullen and Deaver say probably not, while Mayo says it is yet too soon to decide.

To question 7. Which one if either

is a real palliative measure, Boldt, Kelly, Mayo and Deaver say radium; Montgomery and Ochsner as well as Morris say both; Baldy says neither and Cullen does not answer it.

To question 8. Which one if either should be used as a routine after operation, to prevent recurrence? Boldt and Kelly advise radium; Ochsner advises X-ray and also radium in desperate cases; Morris, Baldy, Montogomery, Mayo and Deaver do not advise either as a routine; Cullen does not answer.

To question 9. What is the ultimate prognosis in a clear case of malignant disease of the uterus if subjected to proper treatment before glandular involvement? Boldt says 40% are cured; Kelly says 50% are cured by operation and more if radium is added; Baldy and Deaver say fair; Montgomery says good; Ochsner says exceedingly favorable. Mayo says good if in fundus, fair if in cervix; Cullen says two-thirds of malignant of body permanently cured and twenty-five per cent of cervix unless adeno carcinoma when they nearly all prove fatal; while Morris says ultimate prognosis is not good.

## CHRONIC DUODENAL INDIGESTION IN CHILDREN.

By John Foote, M.D., Washington, D. C.

This condition is said to occur most frequently in children after the first year, and especially in those who have suffered from dietetic errors, usually with antecedent contagious diseases, or from prolonged intestinal infections, and this is fully covered by Foote in the December International Clinics. This form of indigestion seems to be accompanied by deficiency or pancreatic frements, especially lipase. A mild duodenitis, which either passes up the pancreatic duct, or dimished hormone formation, seems responsible for the condition.

Diminished bile production may also be a factor. Anemia, loss of weight

and mental underdevelopment occur. Large pendulous abdomen are common. Bottle feeding has been employed. Fever may be encountered, vomiting almost never. The number of daily stools varies from 3 to 12. They are thin, contain some mucus and flakes of whitish material and have a very foul odor. They give an acid reaction and miscroscopically contain not only large quantities of fat soaps, but also a considerable amount of neutral fat, but rarely starch granules. It is to be differentiated from mesenteric tuberculosis and acute duodenal indigestion. The treatment consists in reducing the food elements which have proven indigestible, namely, the fat, and stimulating enzyme production by the administration of hydrochloric acid and pancreatic ferments.

SURGICAL EXPERIENCES WITH ENCAPSULATED EMPYEMA AND ABSCESS OF THE LUNG. A PLEAFOR EXPLORATORY THORACTOMY.

By Astley P. C. Ashhurst, M.D., Philadelphia, Pa.

Typical cases, well illustrated, are presented in the International Clinics for December, exhibiting the difficulties of recognizing and reaching pus within the pleura even when exploratory puncture is resorted to while it is made plain how much can usually be obtained by surgical means. Refusal to operate when the needle fails to reveal pus at the time set for operation even though pus was previously found, is bad surgery. The surgical technique is carefully described. Local anesthesia is preferred, the intercostal nerves above and below the rib to be resected being blocked with an injection of the anesthetic fluid, novocain or eucain being preferred. For abscess of the lung thoracotomy is preferred to the production of a therapeutic pneumothorax by Forlanini's method as the former gives better opportunity for locating and draining the abscess.



A MEDICAL, CLIMATOLOGICAL AND SOCIOLOGICAL MONTHLY MAGAZINE.

This journal endeavors to mirror the progress of the profession of California and Arizona.

Established in 1886 by Walter Lindley, M.D., LL.D. DR. GEORGE E. MALSBARY, Editor and Publisher.

Associate Editors,
Dr. Walter Lindley, Dr. W. W. Watkins, Dr. Ross Moore, Dr. George L. Cole,
Dr. Cecil E. Reynolds, Dr. William A. Edwards, Dr. Andrew W. Morton,
Dr. H. D'Arcy Power, Dr. B. J. O'Neill, Dr. Otto G. Wicherski,
Dr. Charles H. Whitman, Dr. Edward T. Dillon, Dr. C. G.
Stivers, Dr. Boardman Reed, Dr. W. H. Dudley,
Dr. J. M. Mathews, Dr. A. J. Cook.

Address all communications and manuscripts to
EDITOR SOUTHERN CALIFORNIA PRACTITIONER,
Subscription Price, per annum, \$2.00. 1414 South Hope Street, Los Angeles, Cal.

### EDITORIAL

## DOES CALIFORNIA CLIMATE CHANGE?

Frequently the question is asked: "Isn't the climate changing?" Many will say, "We are having more rain than formerly owing to the greatly increased foliage and vegetation, due to cultivation." These persons forget that in 1877 we had rainfall of 20 inches, in 1883, 38 inches; in 1884, 22 inches; in 1889, 34 inches.

In the nineties, there were five years when there was a rain fall each year of only five, six or seven inches. Then people wondered whether we were going to have desert where we now have orange groves.

Dr. Ford Carpenter, the United States Weather Observer in Los Angeles, recently sent the following to the Los Angeles Examiner:

"Is the climate changing in California?" "Have we ever had such cold rains in Los Angeles before?"

These are some of the questions asked very many times a day of the local weather bureau office. Not only

our own Los Angeles records of 40 years, but the records of San Diego extending back to 1849, and others in the Mississippi Valley of one hundred years, and still others of 200 years begun in New England, all fail to show any progressive change in climate.

The Weather Bureau has not been able to find that the climate of any portion of the United States is getting warmer or colder, drier or wetter; neither has it convinced meteorologists of the recurrence of weather conditions or climatic cycles. These are some of the numerous weather fancies which have to be treated negatively; as to the positive things we can say this:

All weather moves from the west to the east; eastern weather cannot affect California, but California weather always affects the East. Our recent cold rains are the direct result of great masses of cold dry air banking up over the great plateau regions of Nevada, Utah and Arizona. This mass of intensely cold air with temperatures ranging from 15 to 20 degrees below zero overflows the

relatively warm and almost saturated air of the coast district of Southern California. Naturally continuous but inconsiderable condensation results; we see it as cold rain. W.L.

#### GLAUCOMA.

The Treatment of Simple Glaucoma by the use of the "Mule Shoe" drain is discussed in the Ophthalmic Record for October, 1916, by Dr. A. E. Prince. Within the past ten years there have been many operations devised to relieve this vision destroying disease, the object of which has been for the most part, to provide some form of continuous drain for the anterior chamber of the eye which would keep the tension within normal limits. Foremost among these is the operation of Elliot, which consists in making a small trephine operation in the sclero-corneal junction, drawing out and cutting off a small piece of iris, and covering the opening with conjunctiva previously dissected down from above. This operation produced the desired effect in about sixty per cent of the cases operated upon, and a large proportion of these seemed to be permanent. certain per cent of these cases, however, in which the drainage appeared to be ample, infection obtained entrance into the eye, setting up destructive inflammation with total loss of vision result-This complication has been the most disturbing element in the use of the operation, and it has lost much favor in consequence. Foreign bodies in the form of silk thread, one end knotted or otherwise, have been introduced into the trephine opening, while the other end is left free under the conjunctiva, have been used and recommended, but have not become popular for glaucoma simplex. It occurred to Prince that if some nonirritating metal, like gold, could be utilized to keep patent this drainage system, a far greater proportion of successes would follow this form of operation Numerous operations,

therefore, were carried out on animals to determine the amount of reaction this form of drain would cause, which resulted in the choice of an arrangement, which from its shape, he calls the "Mule Shoe." This consists in a piece of small gold wire, six one thousandths of an inch in diameter, from one side of which there projects a small piece of gold, keystone shaped, with the narrower end toward the ring. standing at right angles to the ring in such a manner as to project into the trephine opening while the ring lies flat on the scleral surface; and this is covered by a conjunctival flap formed by making the incision six mm. from the limbus and parallel therewith, and ten to twelve mm. long, which is united again by an overcast suture. Prince has used this operation in thirty three cases with uniformly good results to the present time. The question of the desirability of leaving the gold wire imbedded in the tissues of the eve indefinitely appears to be answered in the affirmative, inasmuch as up to the present there has been no reaction or discomfort manifested in any of the cases, some of which were operated upon over eighteen months ago.

W. H. D.

### LOOK OUT FOR CROOK.

We are in receipt of the following request from the Chief of Police of Glendale, Mr. Geo. H. Herald:—

On January 4th, Dr. Flint of this city had stolen from his office a valuable Spencer special microscope, No. 30, made by the "Spencer Lens Company," Buffalo, New York. Also one Hypodermic outfit and two tubes of Morphine.

This theft was committed by a man described as follows:—American, age 40, height, 5 feet 8 inches, weight, 150 pounds, dark complexion, dark hair, gray eyes, smooth shaven.

This man is a hop head and has a large aneurism on the inside of one

of his legs between hip and knee. This vein is very much enlarged and the blood can be seen and felt pumping thru the same direct from the heart. He makes a practice of calling on physicians and exhibiting this leg to them. He usually succeeds in interesting the doctors in this to the extent of having them examine same, after which he asks them for money. He has been working doctor's offices all around Southern California with this game.

He is also reported to have stolen some valuable articles from a Long Beach physician some time ago.

He also has a large aneurism or blood tumor across his abdomen which he exhibits.

In the case of Dr. Flint, after making the above exhibition of himself he asked the Doctor to aid him financially which the did. The man evidently located this microscope in Dr. Flint's office while the Doctor was examining him for he returned later in the afternoon during the Doctor's absence and stole the microscope and hypodermic outfit. This microscope was afterwards recovered in a Los Angeles Pawn Shop where this thief had sold the same.

We are very anxious to arrest this man as he has been working this game extensively. We hold warrant for him, and I would thank you to kindly publish an article in your paper in regard to this crook asking all physicians to cooperate with us for their own mutual protection from this man, and in case he calls on any of them and makes this exhibition to notify their local police department at once and have this man detained until we can send an officer for him.

### EDITORIAL NOTES

Dr. H. E. Kirschner of Monrovia, has returned from an extended trip in the East.

Dr. L. D. Trott formerly of Redlands has located 1528 Carson Avenue, Hollywood.

Dr. W. J. Hutchison late of Texas has located at Brawley, Imperial Valley.

The Cottage Hospital, Santa Barbara is arranging to open a Free Clinic March first.

Dr. Edward H. Anthony of Los Angeles has been taking a vacation in San Francisco.

Dr. W. M. Kendall city health officer of Venice is urging improvements in their emergency hospital.

Dr. F. S. Chambers has located in Glendale for the practice of his profession, succeeding Dr. E. F. Archer. Dr. Norman Bridge of Los Angeles, recently gave \$100,000 to the Medical Department of the University of Chicago.

Dr. Martin Regensburger has recently been re-elected secretary of the San Francisco Polyclinic. This is a chronic condition.

Dr. W. O. Henry of Omaha, Nebraska has purchased a beautiful residence at the corner of West Tenth Street and Third Avenue, Los Angeles.

Dr. L. D. Remington has recently resumed active practice in Monrovia after having been disabled for several weeks by an automobile accident.

Dr. J. A. Ramsay, formerly of Santa Monica, a graduate of George Washington University, has located in Hemet succeeding Dr. Paul E. Simonds.

Dr. B. C. Davies of Monrovia is having a most attractive office building

constructed for his own occupancy adjacent to the Seven Oaks Hotel.

Two bills have been introduced in the California legislature establishing Tuberculosis hospitals. One bill appropriates \$250,000.00, the other \$900,000.00.

Dr. A. E. Johnson, of Cloquet, Minnesota, is spending his eighth winter in Glendora. It was thirty degrees below when he slipped away from home.

Among the sixteen great nations of the world the United States stands eleventh in the ranking of highest birth rate and seventh in lowest death rate.

Dr. Philip J. Cunnane of Santa Barbara, has located in Los Angeles and is associated with Drs. Holleran in the Broadway Central Building. Welcome to our city.

About a month ago Dr. Wilson passed the examinations at the Mare Island navy yard and this week received his order to report at Wash ington, D. C.

The bureau of Census sends out the report from Washington that out of every ten babies born alive in the United States one dies before reaching the age of one year.

Work has been started on four new hollow tile sanitarium buildings in Lopez Canyon, San Fernando Valley, near Los Angeles for the Independent Order of Foresters.

Dr. T. C. Donnell, dean of the medical profession of Long Beach, and Miss Anna V. Woodsum of Glendora were married at the home of the bride, January seventeenth.

Dr. George B. Kalb of Erie, Pa., has located in Monrovia and formed an association with Dr. H. E. Kirschner. Drs. K. and K. were old friends and neighbors back in the effete East.

Dr. G. Stillman Loveren has recently been appointed County Physician and Health Officer of Santa Barbara County succeeding Dr. J. C. Bainbridge, who had held the position these many years.

The members of the medical profession of Riverside have begun Tuesday morning popular lectures that will last for four months and be an education of great value to all who will attend.

Dr. W. W. Mulvehill, recently of Los Angeles, is now associated with Dr. H. A. Putnam in Inglewood. Dr. Putnam celebrated his new arrangement by taking a much needed vacation of six weeks.

Dr. Frank A. Lowe, who graduated from the Medical Department of the University of Southern California, in 1915, and then spent eighteen months as interne in the Los Angeles County Hospital, has located in Blythe.

The Santa Barbara County Medical Society at its January meeting elected Dr. S. P. Low, president; Dr. R. Manning Clark, secretary, and adopted resolutions indorsing the appointment of Dr. G. S. Loveren as County Physician.

The group includes a service building of two stories in height with 30x40 feet dimensions; a laundry building, one-story high by 16x35 feet and another one-story building 34x82 feet. The foundations have already been constructed.

Dr. C. W. Foster, a graduate of the Medical Department of the University of Southern California, who has been practicing medicine for several years in South America, has located in San Pedro. We welcome Dr. Foster to his own, his native land.

Dr. J. K. Smith, well known in Los Angeles as a graduate of the Medical Department of the University of Southern California, and as interne for eighteen months in the Los Angeles County Hospital, is now associated with his father in the practice of medicine in Bakersfield.

Dr. Agnes T. Wass, 66 years of age, died at her home in Los Angeles, January nineteenth. Dr. Wass graduated from the Woman's Hospital Medical College of Chicago, now a part of the Northwestern University, in 1882 and practiced in Minneapolis before coming to Los Angeles.

Drs. A. J. Scott, Jr., John H. Tebbetts, and Wm. H. Daniels have all secured offices in the Meyers, Pallette Office Building 1501 South Figueroa Street Los Angeles. This is an ideal location for physicians and the building has been constructed with remarkable taste and good judgment.

Dr. Paul Wilson has retired from active practice in Whittier and leaves for Washington, D. C., the latter part of this month and will take a four months' special course in tropical medicine and surgery. The reason for this change is the acceptance of Dr. Wilson by the United States navy as assistant surgeon.

Dr. Thomas Jackson Thompson age 73 years, a graduate College of Physicians and Surgeons, Columbia University, died at his residence in San Diego, January 19th.

He practiced his profession for 30 years on Staten Island. He was deputy health officer at the port of New York for seven years and later American health officer in Japan for eight years. He came to San Diego six years ago.

Speaking of the prevalence of typhus fever in Serbia, the Rockefeller Foundation Annual Report for 1915 says: "Normally Serbia has not more than 400 physicians, a very small number for a population of four and a half millions—about twice the population of California. During January and February, 1915, 60 of these physicians died of typhus and during the stay in Serbia of the members of the War Relief Commission, they were told daily of the death of others."

The death rate in Sacramento city was heavier in the month of December than any one month in many years, according to the figures in the monthly report of Dr. G. C. Simmons, which was read at the city health board meeting last night. This is accounted for by Simmons as a result of influenza, which is in reality pneumonia. There were 35 deaths from this disease, although the physicians reported but four. There were 123 deaths for the month, as compared to 103 for December, 1915.

An Ophthalmological Service has been added to the other departments of Bellevue Hospital, New York. It is located in the new surgical pavilion but is entirely distinct from the rest of the hospital having its own operating, examining and dressing rooms, a staff of attending surgeons, special internes and nurses; its capacity for the present, will be 50 beds. The service is in charge of Dr. Charles H. May, attending surgeon, who will have as his principal assistants Drs. Julius Wolff and John M. Wheeler.

Dr. Robert Couch, said to be the oldest practicing Homeopathic physician in the United States, died January 24th, in Santa Barbara, aged 85 years.

He graduated from the Hanneman Homeopathic College of Chicago fortythree years ago.

For many years he had resided at Carpinteria, leading an active life. He is survived by his widow and four children, F. R. Couch of Oakland, Dr. F. L. Couch of San Jose, Elbert Couch of Lindsay, Mrs. Rilla Chapman of Phoenix, Ariz.

The annual meeting for the election of officers of the Bay District branch of the Los Angeles County Medical Society was held at the residence of Dr. C. P. Thomas, Santa Monica; Dr. I. N. McGee of Venice succeeds Dr.

George A. Fielding of Sawtelle, as president of the organization; Dr. Oscar Anderson of Ocean Park was elected vice-president; and Dr. E. N. Reed of Santa Monica was re-elected to the post of secretary-treasurer. Dr. Fielding, the retiring president, was appointed as the organization's representative on the council of the county society that meets in Los Angeles.

Ninety medical schools in the United States, with a total enrollment in graduating classes of more than 3000 young men, available for army and navy service, have instituted a series of lectures on naval and military sanitation and treatment of the sick in both branches of the service.

These lectures will constitute a regular course in nearly all the medical schools of the country and will be under supervision of Surgeon-General William C. Gorgas, U.S.A., and Surgeon-General William C. Braisted, U.S.N. The new curriculum, has been prepared by the Army and Navy Medical School.

It is predicted that the army and navy, now 600 short in medical officers, will be able not only to fill vacancies, but to have a large reserve.

Kappa chapter of Alpha Epsilon Iota Fraternity, headed by Dr. Veturia Armstrong, was entertained by Dr. Fredericka A. Keep, the vice-president, assisted by Miss Anabel Keep and Mrs. Harriet Keep Arentz of Salt Lake City, the evening of February first at the home of the former, No. 1734 South Ardmore avenue. Maude Mackey, recently returned from North China, told of the opportunities and results in her chosen field of labor, a business meeting preceding the programme and social hour. Members present were Drs. Veturia C. Armstrong, Charlotte Brown, Blanche Brown, Bell Wood-Comstock, Nannie C. Dunsmoor, Marcia Patrick, Lulu H. Peters, Eleanor Seymour, Kate Wilde, Augusta Zuber, Frances Frank, Ethel Leonard, Agnes Scholl and Maude Mackey.

Dr. Ralph L. Taylor, city health officer, has officially compiled Long Beach vital statistics for the year 1916, in which there were only 326 resident deaths. Of all the deaths, resident and non-resident, aggregating 463, 18 were accidental and 5 were suicidal, but not one homicidal.

"No other city in the world can boast a lower infant mortality rate than that of Long Beach for 1916," said Dr. Taylor today. "Only 18 of the resident infants under the age of 1 year succumbed in the twelve-months just past and several of these were born practically without a chance for life. In the entire year only four resident children between the ages of 1 and 5 years passed away. On the other hand, 205 of the resident-deaths were of men and women exceeding the age of 60 years, good old folk who had come to this steppingstone to heaven to pass their last days."

In the year 1916 there were 490 births in Long Beach, 267 native sons and 263 native daughters.

Los Angeles has been making such a boast as that for herself, because her mortality rate last year was only 12.35 per thousand of population, while other low rates were New York, 14.58; ('hicago, 14.82; St. Louis, 14.84; Philadelphia, 16.14, and so on down, or up, the line.

The Long Beach mortality rate last year was 9.31, on the basis of a population of only 35,000. If the population is greater than that, as many believe, the rate was lower. If the population is 40,000 the death rate for 1916 was only 8.15 per thousand.

Southern California Practitioner, \$2.00 per year. 1414 South Hope St., Los Angeles

#### **BOOK REVIEWS**

TEXT-BOOK ON THE PRACTICE OF GYNECOLOGY. For Practitioners and Students. By W. Easterly Ashton, M.D., LL.D., Professor of Gynecology in Graduate School of Medicine of the University of Pennsylvania. Sixth Edition, Thoroughly Revised. Octavo of 1097 pages with 1052 original line drawings. Philadelphia and London: W. B. Saunders Company, 1916. Cloth, \$6.50 net; Half Morocco, \$8.00 net.

In this (sixth) edition the chapters on Microscopic Examination of Tissues, Examination of the Abdomen, Constipation, and Saline Injections have been considerably changed; and the use of argyrol has been advocated in the treatment of herpes of the vulva. Fulguration is advised in cases of papilloma of the bladder. New matter has been added to the article on menstrual diseases, and the treatment of sterility has been elaborated. The operation for laceration of the perineum involving the vaginal sulci has been rewritten and the technic changed. The chapter on shock has been thoroughly revised, the operation of hysterotomy has been added, and the technic of appendectomy altered. We do not pretend to have noted all the changes in this important modern textbook.

MANUAL OF NERVOUS DISEASES. By Irving J. Spear, M.D., Professor of Neurology at the University of Mary-land, Baltimore. 12mo of 660 pages with 169 illustrations. Philadelphia and London: W. B. Saunders Company, 1916. Cloth, \$2.75 net.

There is here embodied in a book of moderate size the facts necessary for a proper understanding of the anatomy, the physiology, and the diseases of the nervous system. It is a little work with a relatively wide range of marked usefulness, being well adapted to the requirements of the busy practitioner of medicine or surgery as well as to the needs of the student of medicine and those paying special attention to nervous diseases. We note, of course with approval, the recommendation of the use of x-ray plates to show retarded development of the bones in cases of paralysis.

THE PRACTICAL MECIDINE SERIES. Comprising ten volumes on the year's progress in medicine and surgery. Under the general editorial charge of Charles L. Mix, A.M., M.D., Professor of Physical Diagnosis in the Northwest-

of Physical Diagnosis in the Northwestern University Medical School.
Volume VII, OBSTETRICS. Edited by Joseph B. DeLee, A.M., M.D., Professor of Obstetrics, Northwestern University Medical School, with the collaboration of Herbert M. Stowe, M.D., Assistant Professor of Obstetrics, Northwestern University Medical School; Attending Gynecologist to Cook County Hospital

Volume VIII, MATERIA MEDICA AND THERAPEUTICS. Edited by George F. Butler, Ph.G., A.M., M.D., Emeritus Professor of Therapeutics, Chicago College of Medicine and Surgery. PREVENTIVE MEDICINE, edited by Wm. A. Evans, M.S., M.D., LL.D., Ph.D., Professor of Preventive Medicine, Northwestern University Medical School. Hospital. Volume

Medical School.

Volume IX, SKIN AND VENEREAL
DISEASES. Edited by Oliver S. Ormsby, M.D., Professor and Head of the
Department of Skin and Venereal Discases, Rush Medical College, and James
Herbert Mitchell, M.D., Hyde Memorial
Fund Fellow, Assistant in Cutaneous
Pathology, Rush Medical College.

Volume X, NERVOUS AND MENTAL
DISEASES. Edited by Hugh T. Patrick,
M.D., Professor of Neurology in the
Chicago Polyclinic, Clinical Professor of
Nervous Diseases in the Northwestern
University Medical School; ex-president
Chicago Neurological Society; Peter
Bassoe, M.D., Assistant Professor of University Medical School, expression Chicago Neurological Society; Peter Bassoe, M.D., Assistant Professor of Nervous and Mental Diseases, Rush Medical College. With the collabora-tion of Lewis J. Pollock, M.D. Series of 1916. The Year Book Pub-lishers, 327 La Salle Street, Chicago.

This excellent series of ten volumes, covering the field of medicine and surgery, is published primarily for the general practitioner. At the same time the arrangement in separate volumes devoted to special subjects, is an advantage to those interested in special work. The price of the series is ten dollars; the price of the volumes here noted is \$1.50 for Volume VIII, and \$1.35 apiece for Volumes VII, IX and X.

THE MEDICAL CLINICS OF CHICAGO. Volume II, Number IV (January, 1917). Octavo of 231 pages, 20 illustrations. Philadelphia and London: W. B. Saunders Company, 1917. Published bimonthly. Price per year: Paper, \$8.00; Cloth, \$12.00.

The first article in this issue is on Splanchnoptosis, by Charles Spencer Williamson, M.D., and is well illustrated by reproductions of radiographs showing the condition before and after treatment. Acquired splanchnoptosis is productive in some cases of symptons: in other cases it is not. The first point to determine is whether the symptons can reasonably be attributed to the splanchnoptosis. If so, the condition becomes a proper one for treatment. The indications for treatment are: First, to remove the traction on the organs by the recumbent position: second, systematic overfeeding to the point where the patients regain their normal weight; third, exercises designed to strengthen the anterior abdominal wall. It is, of course, self-evident that where there is a real floating kidney the result of an imperfectly developed thorax and abdomen, not much will be accomplished by this method of treatment.

The Medical Clinics of Chicago are well worth while.

THE PSYCHOANALYTIC REVIEW. A journal devoted to an understanding of human conduct. Edited and published by William A. White, M.D., and Smith Ely Jelliffe, M.D. Issued quarterly; \$5.00 per volume, single numbers \$1.50. Foreign, \$5.60. The Nervous and Mental Disease Publishing Company, 41 North Queen Street, Lancaster, Pa., and 64 West 56th Street, New York.

This is a journal that should appeal very strongly to psychologists and all those interested in an intelligent understanding of human conduct. In the January issue, the original articles are of the usual excellent character found in this publication. Jelliffe continues his Technique of Psychoanalysis from the preceding volume. The Technique of Dream Interpretation, by Dr. William

Stekel, is translated by John Edward Lind, M.D. Brink presents three abstracts from Iamge, Zeitschrift für Psychoanalyse auf die Geisteswissenschaften. The first of these is an attempted psychoanalysis of the Philosopher, Schopenhauer, by Edward Hitschmann. You should read it if you are interested. We must draw the line somewhere in our reviews.

INTERNATIONAL CLINICS. Edited by Henry W. Cattell, A.M., M.D., Philadelphia. Volume IV, Twenty-sixth Series, 1916. Philadelphia and London: J. B. Lippincott Company.

We are always glad to receive the copies of this standard work. It is difficult to review satisfactorily in limited space, so that we present to our readers from time to time brief abstracts of the more important articles dealing with practical subjects.

THE ANATOMICAL RECORD. Published monthly by the Wistar Institute of Anatomy and Biology, 36th Street and Woodland Avenue, Philadelphia, Pa. Price: \$5.00 per volume.

The January issue contains the Proceedings of the Thirty-third Session of the American Association of Anatomists, and also the Proceedings of the Fourteenth Annual Meeting of the American Society of Zoologists.

BACTERIOLOGY AND PATHOLOGY FOR NURSES. By Jay G. Roberts, Ph.G., M.D., of Oskaloosa, Iowa. Second Edition Thoroughly Revised. 12mo of 210 pages, illustrated. Philadelphia and London: W. B. Saunders Company, 1916. Cloth, \$1.25 net.

In the second edition of this little work a chapter has been added on Pathogenic Anaërobic Bacteria, the erroneous conception of ptomaine-poisoning has been corrected, and the paragraph on toxins amplified. Attention is also called to the supposed role of Endameba Buccalis in the causation of pyorrhoea, and the value of calomel and trikresel as germicides.



# During Pregnancy

STANOLIND Liquid Paraffin is an admirable laxative for use during pregnancy. It produces no irritation of the bowel, has not the slightest disturbing influence upon the uterus, and no effect upon the fetus.

The regular use of Stanolind Liquid Paraffin in the later months of pregnancy is an effective means of avoiding some of the serious dangers attending the parturient state because of sluggish bowel action.

Stanolind Liquid Paraffin counteracts to a definite extent an unfortunate dietetic effect on the intestine in this manner; the concentrated diet of our modern civilized life containes so little indigestible material that the residue is apt to form a pasty mass which tends to adhere to the intestinal wall. Stanolind Liquid Paraffin modifies this food residue, and thus tends to render the mass less adhesive.

Stanolind Liquid Paraffin is mechanical in action, lubricating in effect. Its *suavity* is one of the reasons why increase of dose is never needful after the proper amount is once ascertained.

A trial quantity with informative booklet will be sent on request.

#### Standard Oil Company

72 West Adams Street

Chicago, U.S.A.

## California Hospital Nurses' Directory

(INCORPORATED)

Will furnish Graduate Nurses from the California Hospital School for Nurses, and from other Schools in Los Angeles and in the East

Special Attention Given to Calls of Physicians Both Day and Night
PHONES: Home 556806 Sunset Wilshire 5184

Calls for Nurses for PRIVATE WORK or for HOSPITAL POSITIONS in all parts of California and in neighboring States promptly filled

WIRE OR WRITE MANAGER

#### CALIFORNIA HOSPITAL NURSES' DIRECTORY

137 N. Carandelet Street

Los Angeles, California

EVOLUTION PROVING IMMORTALITY. By John O. Yeiser. Published by the National Magazine Association, Bee Building, Omaha, Nebraska, Price, \$1.50.

These ramblings of a legally trained mind amongst the mazes of evolution, and musings upon immortality, will entertain if they do not edify those trained in the sciences into which the writer has but peeped. It is a book that will prove a blessing to many a down-cast soul, and is very suitable for waiting-room literature.

The January issue contains an editorial on The Conditions of the Circulatory and Respiratory Systems in Pneumonia, that might well be read by every medical man and surgeon in active practice. There is also an editorial review of the work done on the bacteriology of epilepsy, reviewed by Reed in 1914 and which seems to be receiving an ever increasing amount of attention.

THE JOURNAL OF LABORATORY AND CLINICAL MEDICINE. Victor C. Vaughan, M.D., Editor-in-Chief, University of Michigan, Ann Arbor. Published by The C. V. Mosby Company, St. Louis. Price: \$3.00 per annum; single copies 30 cents.

This Journal is of especial interest to those engaged in special work in diagnostic laboratories and clinical medicine, but should not be overlooked by anyone interested in diagnostics.



# RADIUM SULPHUR SPRINGS NATURAL RADIO-ACTIVE MINERAL WATER

It Sparkles and Foams Like Champagne
Hot Baths and Treatments cure Rheumatism, Sciatica,
Neuritis, Paralysis, Locomotor Ataxia, Poor Circulation,
Heart, Stomach, Liver, Kidney, Diabetes, Bright's, Blood
and Nervous Diseases, Female Troubles. Doctor's ad-

vice free. Water delivered. Send for Booklet.

Melrose Ave. Cars Direct to Springs, Los Angeles



ol. XXXII.

LOS ANGELES, MARCH, 1917

No. 3

#### Editor.

DR. GEO. E. MALSBARY.

Associate Editors.

r. Walter Lindley, Dr. W. W. Watkins, Dr. Ross Moore, Dr. George L. Cole, Dr. Cecil E. Reynolds, Dr. William A. Edwards, Dr. Andrew W. Morton, Dr. H. D'Arcy Power, Dr. B. J. O'Neill, Dr. Otto G. Wicherski, Dr. Charles H. Whitman, Dr. Edward T. Dillon, Dr. C. G. Stivers, Dr. Boardman Reed, Dr. W. H. Dualay, Dr. J. M. Mathews, Dr. A. J. Cook.

# HE EYE, EAR, NOSE AND THROAT EYMPTOMS MANIFESTED IN BRAIN TUMOR.

BY HUGO A KIEFER, A.B., M'D.

This subject is one that has occupied the stage for both the oculist, the neudogist, and the general practitioner or many years, and with ever growing terest as the increase in the mass of clinical observation and pathological udy extends our knowledge in this rection, and the representatives of the fferent fields of medicine and surgery ork more coordinately with one another.

Investigators in the various departents have worked with untiring engy to unravel the minutest details om the general skein of confusion till ey have accumulated a mass of mateal which, if used intelligently by the spert trained not only in detail but general observation as well, furnishes vidence which in a large proportion of ises is unimpeachable. Nothing outde of ignorance of one's subject can ore surely lead him astray in diagosis than undue haste in examination, nd a disregard for minutiae. For exnple, see the folly of concluding in a ise of suspected brain tumor that the

diagnesis is unquestionably correct because substantiated by the presence of choked-disc. All we have to do to throw the mantle of doubt over such a conclusion is to remember that there are some forty or more other conditions, general and local, that are capable of causing such choked disc, and it becomes apparent that it is incumbent upon the examiner to eliminate all these other conditions before he can safely say that the choked disc is symptomatic of brain tumor.

With the mass of detail already referred to, it becomes apparent why practitioners are learning more and more to depend upon their confreres for assistance in solving problems which yield to good team work, but which would present insurmountable obstacles to anyone attempting to work them out by himself.

The diagnosis of brain tumor often presents great difficulty, and especially so during the early stages. This is true as far as merely determining its presence in the cranial cavity, and when we endeavor to locate its exact position our difficulties are frequently increased. Likewise the character of the tumor, even after it has been located. is often a riddle, and one that may not be unraveled till after its removal, or following the death of the patient. While it is not the object here to deal with the differential diagnosis of the types of tumors, nor to take up the general diagnostic problems, yet there will be given a very brief introductory resume of the subject, which may be of some value to those seeking to make use of the eye, ear, nose and throat symptoms.

Among the most common tumors to be found, within the cranial cavity are:--Oesteoma or bony tumor; Cholesteatoma, a form of Teratoma that originates in the middle-ear and forces its way through pressure necrosis into the cradal cavity; Gumma, a manifestation of certiary Sypbilis; systs soft tumors, usually of liquid consistence; tubercular tumors, metastatic and usually multiple; and the malignant tumors, glioma, sarcoma and carcinoma of various varieties.

Headache is a nearly constant symptom, but is of little localizing value. It may be general, being easily confused with headache arising from gastro-intestinal disorders and inactivity of the liver; unilateral, constantly on one side or shifting from one side to the other, similiar to the ordinary hemicrania due to dyspepsia, constipation, alcoholic and sexual abuses, pelvic disorders, hysteria, ocular disturbances, frontal, such as occurs very commonly in refractive disorders, and in some of the infectious fevers; occipital headaches and neck pains as are found in eye-strain, and in the intoxication of fevers, etc. Generally speaking, the headache is pretty constant, and apt to be worse on rising, or shortly thereafter; frontal headache often results from tumor in the frontal or parietal lobes; occipital headache from

tumor in the cerebellum; and a persistent pain in one area may suggest a superficially located tumor. Fullness of the head, or tightness, is sometimes complained of, the sensation in such cases being oftentimes referred to the side of the head harboring the tumor.

Vomiting is a very common symptom, especially in involvement of the medulla, cerebellum or corpora quadrigemina. A very characteristic feature is that the expulsion takes place frequently without being preceded by any nausea.

A thorough knowledge of the origin, course and distribution of the cranial nerves is presupposed, so no space will be devoted here to their anatomical discussion.

In order to have a better understanding of the pupillary reactions let us review briefly the paths that the nerve impulses follow in normal pupillary reactions and accommodation. The contraction of the pupil on light stimulation is brought about through the light reflex arc as follows:-(1) Centripital nerve fibres (carrying impulses inward) pass from the retina to the optic nerve, and undergo partial decussation at the chiasma; from here they extend along the optic tracts to the outer geniculate bodies, thence to the anterior part of the anterior corpora quadrigemina, and then on to the nucleus of the sphincter iridis which lies in the anterior part of the third nerve nucleus. (2) Centrifugal fibres (carrying impulses outward) arise from the nucleus of the sphincter just named, and pass into the pons to be there joined by nerve fibres proceeding from the ciliary nucleus; they then pass in to the third nerve, then to the ciliary ganglion, and finally enter the globe by the short ciliary nerves; these pierce the sclera near the posterior part of the globe, pass forward between the sclera and choroid, and enter the ciliary body and iris, supplying the sphincter muscles of the eye corresponding to the side of the nerve origin n the brain.

Dilatation of the pupil is produced by stimulating the muscle fibres of the costerior limiting membrane of the iris, and by stimulating the blood-vessels of the iris to contract and shorten. Both these tissues are supplied by the cervical sympathetic nerve, which has its origin in the superior cervical ganglion. This ganglion lies behind the sheath of the internal carotid artery and jugular vein, usually occupying a position opposite the second and third cervical vertebrae, though it may extend down as low as the fifth.

"Choked disc." This is one of the most commonly looked for symptoms by the diagnostician; and it is likewise one of the most misinterpreted symptoms as a glance at its etiology will reveal. The term itself has been the subject of much controversy, some preferring the term descending neuritis, and others papillitis, to choked disc. The condition might be summed up as follows:-Papillitis occurs in two forms, (1) choked disc; (2) descending neuritis. Choked disc presents first a hyperemia of the disc, with some blurring of its margin more marked usually in one portion than another, and some dilitation of the veins; this is followed by decided swelling of the disc, and great engorgement and dilatation of the retinal veins which become quite dark in color and remarkably tortuous, and by contraction of the arteries. The swelling and oedema are pretty well limited to the disc itself, the retina, except for its vessels and a very small area immediately surrounding the disc, not showing much change.

Descending neuritis presents more involvement of the retina, such as exudation, white patches and hemorrhages. The retinal veins are less swollen and tortuous; and the disc less swollen and paler than in choked disc, and in many cases grayish or whitish from fibrinious exudate.

The two conditions are very similar, and in most cases cannot be separated, though in typical cases descending neuritis may be said to be more significant of inflammation, and choked disc more suggestive of pressure and congestion. In either case vision is very apt to be disturbed from a very slight degree to complete blindness, though some cases present no disturbances whatsoever. The fields are apt to be contracted, especially for colors, and the latter often overlap each other irregularly. Hemianopsia, and more often scotomata, occur.

A number of theories have been advanced as to the manner in which papillitis can be produced by the presence of an intra-cranial tumor. Each of these seems very reasonable, each has its ardent supporters, and many facts can be offered for the support of each theory. Whether papillitis is dependent entirely on any one of these causative factors, or whether it may be produced in several ways must therefore still remain a mooted question. (The author favors the idea that it may be produced in several ways.)

One theory holds that papillitis is due to intra-cranial pressure, and is based on the following facts:—the subvaginal space of the optic nerve is continuous with the subarachnoid space of the brain; substances introduced beneath the dura have been found shortly after in the subvaginal space of the optic nerve; and any increase in the intra-cranial pressure will, in a short time, produce engorgement of the retinal veins, and constriction of the retinal arteries.

Sourdille's theory is as follows, and was founded upon the fact that internal hydrocephalus is productive of papillitis. The posterior portion of the optic tracts find their way into the third ventricle, being here covered by ependyma. The oedema which is present in the gray matter of the third ventricle passes on to the neuroglia cells of the optic tracts

and nerves. Thus the nerve becomes swollen and larger in size, and on account of the unyielding condition of the bony optic foramen through which it passes there is produced virtually a constriction at this point, which has the same effect as tying a ligature around a finger,—the distal portion of the veins become engorged and the arteries constricted both in the nerve and in the pia which covers this portion of the nerve, the lymphatic circulation is interfered with, and exudation and possibly hemorrhage takes place in the retina.

Still another theory holds that there is present in the system or in the subvaginal space, some substance that is irritant to the tissues of the optic nerve which brings about an inflammatory condition with congestion, swelling and exudation, and tendency to optic nerve atrophy.

Pathology does not help us out any more than do the clinical manifestations in placing either one of these conditions; choked disc or descending neuritis, ahead of the other as an ocular manifestation of brain tumor. The following conditions have been revealed by the microscope in eyes taken from cases of brain tumor. Oedema and round cell infiltration into the sheath of the nerve; distention of the subvaginal space; leucocytic infiltration of the papilla; interstitial inflammation of the optic nerve; veins dilated distally and constricted proximally to the lamina cribrosa; arteries constricted beyond the lamina cribrosa; same condition veins and arteries may obtain in relation to their position relative to the optic foramen; oedema, hemorrhage, or fibrinous exudate of disc or retina, or of both; atrophy of nerve fibres ensuing. Any of the above named conditions may be found in either choked disc or in descending neuritis; or any of them may be absent in either case, except the constant conditions of engorgement of the veins beyond the

lamina cribrosa, and swelling of the disc with blurring or obliteration of its margins.

Papillitis is variously estimated to be present in from 70% to 95% of all brain tumor cases, and its development seems to be favored somewhat by the location of the tumor. For instance. it is present in the vast majority of tumors located in the cerebellum or in the corpora quadrigemina, while in tumors of the medulla, pons and corpus callosum it is quite frequently lacking. In tumors near the surface, as in the meninges or in the cortex, it seems to occupy a medium position for frequency of occurrence. Again, the frequency of its absence in tubercular tumors of the brain as compared to cystic tumors is quite noticeable. Of all cases of papillitis, between 90% and 95% are bilateral, the balance being unilateral. Some claim has been made that when it is single it is most apt to occur on the side of the brain lesion, or that if double, the worst degree of choking is usually found on that side on which the brain is affected. But this statement is so often controverted by the findings in actual practice that it seems doubtful if any value can be placed on such conditions.

How long does a tumor have to exist before papillitis develops, is often asked. This depends somewhat on the location and character of the tumor. In tumors of the medulla and pons it often develops late, while in tumors of the cerebellum it is as often an early symptom. In cystic tumors it is apt to develop early, and in tubercular tumors, late. Generally speaking, it may take from a few days to a number of months, usually a few weeks to three or four months.

The size of the tumor is not so important a factor in bringing on papillitis as would naturally be supposed, for sometimes a very small tumor will produce marked papillitis, where a very large tumor will produce none.

When one seeks for eye symptoms onfirmatory of the diagnosis of brain umor he should not accept the findings f a papillitis as good evidence of that ondition until he has eliminated all ther possible causes of papillitis, and mong such other possible causes we ave meningitis, cerebral abscess, cereral hemorrhages, encephalitis, thromosis of the lateral sinus, hydrocephalus, mbolism of the cerebral vessels, muliple sclerosis, caries of the skull bones, .g. the sphenoid, violent injuries of the ead, deformities of the skull, epilepsy, horea, alcoholism, lead poisoning, hlorosis, pernicious anaemia, leukaemia, evere hemorrhage, gout, rheumatism, yphilis, tuberculosis, malaria, tetany, remia, diabetes, nephritis, pregnancy, etained secundines, menstrual disorders, nenopause, excessive lactation or checkng of the normal lactation, typhoid ever, whooping cough, pneumonia, tyhus fever, refractive errors, orbital iseases, diseases of the accessory nasal nuses, suppurative mastoiditis, suntroke and hereditary tendencies. The lost common of these causes are intraranial tumors, meningitis and syphilis. Amblyopia, a condition of diminished cuity of vision without any apparent hange in the eye-ball, is a fairly comon symptom. It has been observed tumors of the base in the anterior ossa, also in tumors of the cerebelium, which cases pressure may be brought bear on the optic tracts or the optic adiations. It may be single or double emporary, recurrent or constant.

Amaurosis is a term which originally teant blindness without any visible cular changes. When limited to this ense the conditions of pressure which roduce it are practically the same as mose causing amblyopia.

Among the other causes of amblyopia be remembered are refractive errors ceuring early in life, hysteria, simution, uraemia, malaria, reflex irritation from the teeth, and quinine.

Scotomata are defects in the visual

field, appearing as an object that the patient sees (positive scotoma), or as a blank in the field of vision (negative scotoma). There are also color scotomata which represent blind spots to red, green, etc., in the color fields. These are commonly the result of hemorrhagic spots in the retina, exudative patches or fields of organized exudate, or atrophied areas, accompanying or following papillitis when present. No doubt it is sometimes due to localized pressure centrally, or to the toxemia that may accompany brain tumor.

It should not be forgotten that there is a physiological blind spot in all eyes; and that scotomata may have their origin in primary diseases of the retina, choroid and vitreous, and in secondary eye diseases dependent on other causes than brain tumor, such as syphilis, tuberculosis, pregnancy, renal disease, diabetes, and tobacco and alcoholic toxemia. The last named cause gives rise to the well known color scotoma.

Optic nerve atrophy is not nearly so common as papillitis in brain tumor, and the majority of cases of partial or complete atrophy may be said to be dependent on and to follow papillitis, the result of pressure and the interference with circulation and nutrition.

It seems to accompany tumors of the base in the anterior fossa, and pressure in the region of the chiasma more frequently than tumors occurring in other regions. Atrophy may be primary (non-inflammatory), or secondary (postinflammatory). In the first variety the disc presents a shallow, saucer-shaped cup, is white or grayish in color, edges sharply defined, lamina cribrosa usually very distinct, and the retinal arteries are generally diminished in calibre. In the second variety there is the same shallow cup, the disc is covered with a white or grayish connective tissue which hides the lamina cribrosa, the margins are apt to be less clearly cut than in the former variety, the retinal arteries are small,

and the retinal veins are often large and tortuous as a result of obstruction.

Subjectively there are reduced acuity of vision, sometimes scotomata, contraction of the field for colors first and then for form, loss of the color sense first for green, next for red and then for blue, and finally blindness.

Overlapping, irregularity, or contraction of the color fields may be present in brain tumor without any apparent change in the optic nerve, or it may be followed by atrophy and blindness.

Hemianopsia, blindness of one-half of the visual field, may be monocular or binocular, and it may affect the nasal, the temporal, the superior or the inferior halves of the fields or it may be a sector-like defect. It is found in lesions of the optic chiasma, tumors at the base in the anterior fossa, in the temporal lobes, in the occipital lobes, and in the optic thalami. It is a very common symptom in tumors of the occipital lobe, where pressure is apt to be exerted on the optic radiations in the white substance of the brain. If the cortex itself be involved in the region of the cuneus and calcarine fissure there will result optical hallucinations, and alexia or word blindness.

For convenience in diagnosis we may give the following:-blindness of one eye and loss of direct pupillary reaction indicates lesion of optic nerve on same side; right homonymous hemianopsia (blindness of the left half of each retina) and pupils not reacting to light thrown on left halves of retinae, lesion in optic tracts; right homonymous hemianopsia and pupils do react to light thrown on any portion of the retinae, lesion in optic radiations; bitemporal hemianopsia (blindness of inner half of each retina), lesion at optic chiasma; right nasal hemianopsia (blindness of left half of left retina), lesion at left angle of optic chiasma; binasal hemianopsia (blindness of outer half of each retina), lesion at each outer angle of chiasma.

Dilatation of the opposite pupil has been observed in lesion of the optic thalamus. Contraction of the pupil on the same side has accompanied pressure on the cervical sympathetic in tumor of the medulla.

Exophthalmos is sometimes seen in tumors of the base in the anterior fossa. Intra-cranial sarcoma originating in the eye itself (choroid) and extending backwards may cause this symptom in the later stages. Most commonly it results from thrombosis of the cavernous sinus, or from an arteriovenous aneurism due to rupture of the carotid artery into the cavernous sinus. It should be borne in mind that exophthalmos may be produced by a number of intra-orbital conditions, and by Graves' disease.

Ptosis, or drooping of the upper lid, is usually associated with paralysis of other muscles supplied by the third nerve. When not thus associated it is often dependent on cerebral disease.

The extrinsic muscles of the eye-ball may be paralyzed singly, in multiple, or altogether, the latter condition constituting external ophthalmoplegia. Paralysis of the ciliary muscle and sphincter pupillae together constitutes internal ophthalmoplegia. The combination of the two last named conditions is known as total ophthalmoplegia. In paralysis of any of the external muscles the head is often carried in an unusual position in an attempt to bring the two eyes in a position so related to each other that they can fuse images. The vertigo, nausea and staggering gait often accompanying brain tumor are frequently the result of ocular paralysis, and the failure to fuse images. These symptoms are frequently relieved by suppressing the false image by covering the deviating eye. External ophthalmoplegia, generally due to nuclear paralysis, is more common than total ophthalmoplegia, as the nuclei of the sphincter pupillae and the ciliary body are separate from those controlling the external muscles. Central lesions causing paralysis of the ocular muscles may be situated in the cortex, in the nuclei of origin, in the association centres, or in the fibres which constitute the connecting links between these centres. The differential diagnosis between central and peripherial paralysis is often difficult or impossible. In a general way it may be said that in central paralysis more than one muscle is involved and there are apt to be other cerebral symptoms.

Neuroparalytic keratitis results from compression of the Gasserian ganglion causing interference with the function of the ophtalmic branch of the fifth nerve. The cornea becomes cloudy and sometimes develops ulcers, and shows a diminished sensibility to touch. Tumors of the base in the middle fossa are likely to produce the condition. The fifth nerve is also sometimes involved in lesions of the base in the posterior fossa.

Let us suppose a total paralysis of the third nerve:—there will be ptosis on the same side; exophthalmos; the eye deviates outward and downward; and the upper end of the vertical meridian inclines inward; the pupil is dilated and immobile; accommodation is paralyzed; the face is tilted upward and toward the sound side, and the head is inclined toward the shoulders of the paralyzed side.

Paralysis of the fourth nerve allows the eye to deviate upward, and inward, and the top of the vertical meridian leans outward. The face is inclined downward and toward the sound side, and the head leans over the shoulder of the sound side.

If the sixth nerve is paralyzed the eye turns inward, and the face is turned toward the paralyzed side.

Paralysis of the seventh nerve causes inability to close the eye-lids, or to contract the muscles of expression in the face.

Nystagmus, in the present day, is

prone to be associated by the examiner with disease of the internal ear. But it must not be forgotten that there can be nystagmus due to intra-cranial disease independent of ear involvement, as well as other causes. To make the differential diagnosis clear it will be necessary to introduce the phenomena of nystagmus as induced by diseases of the ear, and by various tests applied to the normal ear.

In the first place, what is nystagmus, and how can it be produced by certain experimental or pathological excitations of the internal ear? Nystagmus is an oscillation of the eye-ball horizontally, vertically, or rotary, with a quick movement in one direction and a slow return in the opposite. instance, if the eye moves quickly to the right and returns slowly to the left, there is said to be horizontal nystagmus to the right. An experimental nystagmus may be produced as follows:-syringe the right ear with water at 70° F., while the head is held erect, and it will produce a horizontal nystagmus left, that is the quick component will be left. If water at 115° be substituted, the nystagmus will be right. The stimulation induced by the change in temperature is transmitted by the vestibular nerve to Deiter's nucleus, and from there to the oculo-motor centre which controls the extrinsic eyemuscles, both Deiter's nucleus and the oculo-motor centre liyng in the floor of the fourth ventricle.

Horizontal nystagmus, unlike rotatory nystagmus, is apt to be accompanied by vertigo, nausea, and even by vomiting.

Again, nystagmus may be produced by turning the patient, as follows:—Place the subject,—a healthy ear presupposed, on a stool, revolve him ten times to the right during a space of 20 seconds, and during this turning there will be nystagmus to the right, which gives place to a nystagmus in the opposite direction, (after-nystag-

mus), when the turning has ceased. While the nystagmus produced as described above is of a very fleeting character, lasting for but a few seconds, that which is dependent on disease of the labyrinth is of lasting character, though not permanent. Suppose there be present a circumscribed inflammation of the labyrinth on the right, the nystagmus will be right, that is, to the diseased side. If, however, the pathoprocess continues until logical labyrinth is completely destroyed, the nystagmus will swing to the opposite, the sound side, for three or four days, and will then subside entirely. But if there happened at this time to be a brain complication, the nystagmus would not cease, but would turn once more, presenting a nystagmus to the right again. Vestibular nystagmus tends to decrease with time and to become permanently quiet, while nystagmus of intra-cranial origin tends to increase and to remain more or less permanent. sometimes find that intra-cranial nystagmus is directed to either side, but with greater intensity toward the side of the tumor.

Given a case of nystagmus of supposed intra-cranial origin, how could it be proved? If deafness were present. but no apparent changes in the middle ear, and normal reactions were illicited for the caloric and revolving tests, the nystagmus, if persistent, could not be of vestibular origin, and hence would probably be intra-cranial in type. Suppose, again, we have a case of nystagmus to the opposite side of a diseased ear which does not respond to the caloric test, we may be dealing with a nystagmus of either vestibular or intracranial origin. If now we operate on and destroy this vistibule, and the nystagmus after a few days swings over to this diseased and operated side and continues persistently, it must be good evidence of its being intra-cranial in origin.

In making these tests it should be remembered that in circumscribed labyrinthitis the response to the caloric tests is the same as in a normal labyrinth.

Among other possible causes of nystagmus should be mentioned brain abcess, meningitis, inherited syphilis without localized lesion, Meniere's disease, which is probably vestibular in type, acute suppurative otitis media, locomotor ataxia, occupational or miner's nystagmus, and toxemia as during fevers.

The ear symptoms of brain tumor while not as numerous, and probably not as thoroughly worked out as the eye symptoms are nevertheless just as important, and the future will likely see great development along these lines following the impetus that has already been given this branch of the subject. Persistent tinnitus or deafness may be caused by pressure upon the auditory nerve, or by a stretching of its fibres if there is no direct pressure. Theoretically at least this pressure may result in a lymph stasis or in a neuritis, similar to that produced in the optic nerve. Such symptoms have been noted in extra-cerebellar tumor arising from the auditory nerve, where the deafness to air and bone conduction increase gradually. If in these cases bone conduction is unimpaired, symptoms cannot be dependent on labyrinthine disease, and any facial paralysis does but add to its significance. It should be remembered that it is not uncommon to find a considerable reduction in the high tone perception in old people. Irritation of the geniculate ganglion has likewise been known to produce dizziness and falling; and tumors of the corpora quadrigemina which have injured the upper layer of the tegmentum have caused impairment of hearing. Tumors arising from the eighth nerve not only give rise to tinnitus and impaired hearing on that side, but cause nystagmus to the affected side on turning the eyes to that side.

Anosmia, or absence or impairment of the sense of smell has been noted in tumors of the base involving the anterior fossa and causing pressure on the first cranial or olfactory nerves, or on the bulb or the olfactory tracts. The same symptom is very commonly produced by obstruction of the olfactory fissure in the nose by reason of a swelling or hypertrophy of the middle turbinate bódy, a deviation or thickening of the nasal septum, or the presence of polyps. It is not uncommon to observe anosmia in the second or third stage of syphilis in which there is a partial anaesthesia of all the nerves of the upper respiratory tract; or following an attack of Grippe, in which case, however, the anosmia is not of a permanent character.

Laryngeal paralysis may be unilateral or bilateral, and is commonly associated with paralysis of the lips, tongue and pharynx. It occurs in disseminated sclerosis of the medulla, pons and spinal cord, and in vascular lesions and tumors of these parts. Bilateral vocal cord paralysis is always very suggestive of a central lesion.

Among other causes of cord paralysis are diphtheria, hysteria, over-use of the voice, cold, local injury and disease, and thyroidectomy; also pressure on the recurrent laryngeal nerves by an enlarged thyroid gland, malignant growths of the oesophagus, cicatricial contractures at the apices of the pleura; and by aneurism of the right subclavian or the lower portion of the right common carotid arteries (causing right cord paralysis), and aneurism of the lower portion of the left common carotid artery or the arch of the aorta (causing left cord paralysis). The symptoms of such paralysis, aside from those presented in the laryngeal mirror, are huskiness, weakness or absence of the voice: dyspnoea, cough, or inability to cough; and if the pharyngeal muscles and

palate are paralyzed owing to involvement of the ninth, the spinal accessory, and other branches of the tenth nerve, there will be a loss of the pharyngeal reflex, dysphagia and regurgitation of food.

In unilateral abductor paralysis the voice is but little affected, and the same is true in bilateral abductor paralysis, but in the latter case there is inspiration stridor, cyanosis, and possibly death by suffocation.

In unilateral abductor paralysis the voice is hoarse and weak, while in the bilateral form the voice is lost, but coughing is possible. If there be total bilateral paralysis it is impossible to make a sound.

The following method of presenting symptoms according to the location of the tumor serves to show how often growths in different locations will give rise to the same symptoms. Of course not all these symptoms are found in every case.

Tumor at the base, in the anterior fossa:—anosmia, exophthalmos, oculomotor paralysis, amblyopia, hemianopsia, choked disc, and optic nerve atrophy.

Tumor at the base, in the middle fossa:—interference with the proper movements of the eye-ball through pressure on the third and sixth cranial nerves; and neuropathic keratitis through pressure on the Gasserian ganglion.

Tumor of the base, in the posterior fossa:—sensory disturbances of the eye through pressure on the fifth nerve; internal squint by reason of pressure on the sixth nerve; ptosis through seventh nerve pressure and tinnitus and disturbances of hearing on account of pressure of the eighth nerve, the two latter being often associated.

Tumor of the frontal lobe:—interference with proper eye movements; inability to speak.

Tumor in parietal lobe:—hemianopsia; world-deafness.

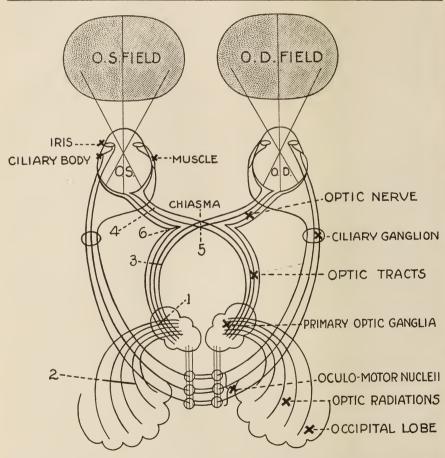
Tumor in temporal lobe:—hemianopsia; ptosis, and paralysis of the extrinsic ocular muscles.

Tumor in occipital lobe:—here are located the higher sight centres and pressure on them will produce word blindness (alexia); hemianopsia, by pressure on the optic radiations; and optic hallucinations, which latter are probably due to irritation of the cortical centres.

Tumor in pons:—the third, fourth, fifth, sixth, seventh and eighth cranial

nerves are frequently involved, giving rise to ocular paralysis and ptosis, and to tinnitus and disturbances of hearing.

Tumor in medulla:—paralysis of the ninth, tenth, eleventh and twelfth cranial nerves, giving rise to paralysis and atrophy of the larynx, pharynx, palate, lips and tongue, and jaw; hoarseness, stridor, regurgitation of food; nystagmus; contraction of the pupils and ptosis; frontal and vertical headache; impairment of hearing, diplopia, and



Division of fibres at

- (1) abolishes pupillary reaction to light thrown on left half of either retina.
- gives right homonymous hemianopsia with preservation of the pupillary reaction to light.
- (3) gives right homonymous hemianopsia with abolition of pupillary reaction to light thrown on left side of either retina.
- (4) complete blindness and loss of direct
- pupillary reaction in left eye.
  (5) gives Bitemporal Hemianopsia.
  (6) gives right nasal Hemianopsia.

intra-orbital pain have also been observed.

Tumor of corpus quadrigemina:—dilated pupils, ptosis, extrinsic ocular paralysis, amblyopia; impaired hearing through destruction of the upper layer of the tegmentum.

Tumor of optic thalami:—paralysis of the extrinsic eye muscles; dilatation of the pupil on the other side; hemianopsia of the opposite halves of the fields.

Tumor of cerebellum:—papillitis is very common; occipital headache usually present; any or all of the symptoms given under lesions in the medulla, pons and corpora quadrigemina may be present, due to compression of these parts. Likewise symptoms will arise due to pressure on the last eight cranial nerves, such as tinnitus and impaired hearing, and sensory and motor disturbances of the eye and its adnexa, and of the tongue, plate, pharynx, and larynx.

HUGO A. KIEFER A.B.,M.D. 406 Brockman Building, Los Angeles.

# ACUTE SYPHILITIC MENINGITIS. By Boris Bronstein, M.D., Odessa, Russia.

Bronstein considers that the term acute syphilitic meningitis should be more particularly applied to meningeal phenomena of the secondary period, sometimes preceding, but more frequently accompanying the cutaneous manifestations of this period. The pathology is essentially a meningovascularitis with hypersecretion of the cerebrospinal fluid. Prodromal symptoms, such as headache and insomnia, may or may not occur. Acute syphilitic meningitis at its height, as Bronstein says in the December International Clinics, presents the clinical picture of the tubercular form, differing from the latter by the indistinctness of the symptoms, such as contractures and stiffness of the neck, and by the absence of any marked disturbance of the pulse and respiration. In the luetic form fever is apt to be absent and there may be remissions and relapses. Lumbar puncture reveals a considerable hypertension of the cerebrospinal fluid, albumin in quantity, and a marked lymphocytosis with plasmozellen. The cerebrospinal fluid may yield a positive Wassermann even when the blood serum is negative. Other manifestations of syphilis are to be looked for. The immediate prognosis is rarely fatal but the ultimate prognosis should be reserved. Prophylactic treatment is recommended whenever the cerebrospinal fluid shows a lymphocytosis, even when all meningeal symptoms are wanting. The treatment consists in frequently repeated removal of the cerebrospinal fluid in considerable amount, combined with intravenous injection of cyanide of mercury and intraspinal injections of colloidal mercury. Neosalvarsan or salvarsan have a much more rapid action, but must be pru dently handled in neurologic lesions of syphilis.

The Interol Treatment of Chronic Constipation in the Elderly is rational It fills one want, in a harmless and effective way, namely, the want of colonic lubrication.

While lubricating, it also acts beneficially by softening—or rather by keeping soft—the intestinal contents, and by protecting any bare spots in the tract. Finally, it combats the accompanying auto-toxemia by sluicing out the feces with their toxins, as is evidenced by the improvement in complexion and in general well-being shown by many of these patients after steadily using Interol.

All this is done without enervation to an already weakened organism. Is there any one thing at the physician's command that will do as much for these patients?

<sup>\*</sup>Further literature on this subject, on request. Van Horn & Sawtell, 15-17 E. 40th St., New York City.



A MEDICAL, CLIMATOLOGICAL AND SOCIOLOGICAL MONTHLY MAGAZINE.

This journal endeavors to mirror the progress of the profession of California and Arizona.

Established in 1886 by Walter Lindley, M.D., LL.D. DR. GEORGE E. MALSBARY, Editor and Publisher.

Associate Editors,
Dr. Walter Lindley, Dr. W. W. Watkins, Dr. Ross Moore, Dr. George L. Cole,
Dr. Cecil E. Reynolds, Dr. William A. Edwards, Dr. Andrew W. Morton,
Dr. H. D'Arcy Power, Dr. B. J. O'Neill, Dr. Otto G. Wicherski,
Dr. Charles H. Whitman, Dr. Edward T. Dillon, Dr. C. G.
Stivers, Dr. Boardman Reed, Dr. W. H. Dudley,
Dr. J. M. Mathews, Dr. A. J. Cook.

Address all communications and manuscripts to EDITOR SOUTHERN CALIFORNIA PRACTITIONER, Subscription Price, per annum, \$2.00. 1414 South Hope Street, Los Angeles, Cal.

#### EDITORIAL

#### "BIRTH CONTROL."

At the present time so-called "Birth Control" is claiming more or less attention of pretty much all classes of society. Though interested in the social and economic aspects of the questions involved, physicians are especially concerned in the subject from the standpoint of the preservation and conservation of the health of both the individuals and the community. It is but natural that we should be interested in the physical welfare of those entrusted to our care.

In the broad sense, birth control should comprehend both the voluntary increase of fertility, so-called "birth release," and the limitation of off-spring, which is usually referred to in the more narrow application of the term "Birth Control." Both of these phases have received considerable consideration by the medical profession. There are few more harrowing experiences among the many tragedies of life observed by physicians, than the heartrending plead-

ings for the relief of sterility in incurable cases. Inability to have children begets a peculiarly strong desire for parenthood. Of grave import to society at large is the one and two child sterility so common in this country.

Turning to the other side of the question, the limitation of offspring, which is being so widely discussed by both physicians and the laity, attention centers chiefly upon the propriety and the practicability of the various measures proposed. Religious training and tenets of both physicians and patients must needs be taken into consideration, for there are many who believe that the limitation of offspring should be accomplished only through continence. It is not rare for marriage to be postponed because the individuals are not prepared physically or economically to assume the responsibilities of having children. Furthermore, many physicians unfettered by religious restrictions, regard continence as the only sure and safe method of limiting offspring without mutilation of the individual. When it comes to the use of contraceptives, it would be interesting to know the ideas of those urging popular instruction along this line, for physicians are far from united regarding the efficacy and safety of the various remedies and measures that have been suggested for this purpose, with the possible exception of resection of the cord or tubes, procedures that probably would not become popular.

The x-ray may be so used as to either stimulate or curtail the activity of the ovary. The sterility thus produced is temporary, unless the radiance has been greatly prolonged. But the use of the x-ray could in no wise be construed as a safe or practicable procedure to offer for popular instruction for any purpose.

#### OUR DUTY

In a sort of abstract way, we as physicians claim to believe that we recognize our duty to be the devotion of our lives to the prevention and relief of suffering and the prolongation of life. But when it comes to the concrete, we are often too prone to subvert our energies rather to the recognition and demonstration of pathological conditions. It is the old story of treating abnormalities rather than the patient, a tendency to permit our scientific spirit to blind rather than augment our humanitarianism. medical man is prone to pay attention to the working out of his favorite theories as to diagnostic procedures and the action of therapeutic agents, rather than the welfare of the patient. The surgeon too often feels that nothing can be done for his patient, when he fails to find a lesion or gross pathological condition requiring surgery. The various specialists tend to view their patients as cases rather than as human beings.

Why all this tirade? Because we are too often neglecting our duty to our patients. It was largely this spirit in the profession that led to the popularity of so-called homoeopathy during the last generation, and is in large measure responsible for the present day growth of many fads. Let your patient know, and be sure that it is a fact, that you have a real interest in his welfare, that you are truly devoting your life to the relief of suffering and the prolongation of life, and you will not lack patronage but will be an honor to your profession and will be rewarded by the clear conscience of one who is doing his duty.

#### OSLERISM A JOKE

The recent death in London of the famous English novelist, William Frend De Morgan, in his seventy-eighth year, reminds us once more that no matter what his age, one is never too old to succeed.

De Morgan was sixty-five years old when he discovered the talent that made him rich as well as famous. Previous to this he had been a maker of stained glass windows and blue tiles and an inventor of smoke consumers and bicycle gears, but in none of these lines had he made either fame or riches.

It was while recovering from a long and serious illness fourteen years ago, in 1903, that De Morgan began to write for his own amusement. The result was Joseph Vance, a novel of 230,000 words, which from the moment of its publication was a tremendous success. Those who have read the book readily understand how, in spite of its unusual length for this day of short novels, it became as popular in this country, and wherever the English tongue is spoken, as any of Charles Dickens' novels.

After the discovery of his greatest

talent Mr. De Morgan did not lay down his pen until death called him away. One successful novel followed another in rapid succession and wealth and fame in overflowing measure came to the author in the decades between sixty-five and seventy-eight.

Whether Osler's dictum was intended as a joke or a warning it has done much toward decreasing the efficiency of man.

When a man reaches sixty he is very liable to involuntarily begin to prepare for his period of uselessness. Sixty should be the time of man's greatest efficiency. Forget Osler and prepare for your greatest work, should be the sexagenarian's slogan!

#### EDITORIAL NOTES

Dr. Sydney V. West has located in Santa Ana.

Dr. G. C. Nichols, of Los Angeles, has located in Santa Paula, Ventura County.

San Francisco dedicated a Central Emergency Hospital that cost \$90,000.00 on March 6th.

Drs. P. G. Cotter and J. W. Kean have their offices in Suite 935 Title Insurance Building.

Dr. D. E. Dewey, a graduate of the medical department of the North Western University has located in Lompoc, Santa Barbara County.

By order of the court, Dr. George L. Cole was awarded \$12,500.00 for the amputation of a wealthy patient's leg including previous and subsequent treatment.

Dr. Sylvester P. Davis, age 68 years, died in Hollywood, February 20th. The doctor had lived in Hollywood for the last ten years and was a graduate of Ann Arbor.

The San Diego Sun of February fifth says there are 150 cases of tuberculosis in San Diego for which there are no beds in the county hospital or the La Mesa camp.

Dr. Leonard Franklin Dozier for 29 years medical superintendent of the State Hospital for the Insane at Napa,

died March 9, at the home of his son in San Francisco.

It took a Los Angeles jury five minutes to exonerate Drs. Carl Kurtz and Philip J. Cunnane in a malpractice suit where the insignificant sum of \$150,000.00 was demanded.

Dr. Rufus A. Holt, formerly resident physician at the California Hospital, has located in Suite 1018 Brockman Building. Dr. Holt devotes himself to general practice, which is unusual.

Sanitarium; 21 rooms well furnished, suitable location near city center. Residential appearance; 12 years obstetrico-gynelogical, also general practice. Good income. Retirement—sickness 2111 Lawrence St., Denver, Colo.

The San Diego people have arranged to give the doctors and their families a fine time at the annual meeting of the State Medical, April 17-20. The proceedings will open with an address by the president, Dr. Geo. H. Kress.

Dr. Leopold Goldschmidt, a native of Hungary, seventy years of age, died in Los Angeles, Monday, February twelfth. He came to Los Angeles several years ago from Mexico where he held a government position. He graduated from Bellevue Hospital in 1868.

The John P. Scripps' Clinic in San Diego has opened a commodious hospital with a large staff of physicians, surgeons and specialists. The clinical receives only patients who are members of families having a total income not in excess of \$100 a month, or single persons whose income does not exceed \$80 per month.

The Los Angeles Examiner of February eighteenth says: "Dr. C. W. Harvey of Anaheim, a prominent practicing physician of that place, was vesterday arrested and charged with murder, following the accusation of A. E. Baker, a colored bootblack, that Dr. Harvey had performed a criminal operation on his wife, Mrs. Sophie Baker, and that she died as the result. Dr. Harvey was released on \$10,000 bond pending his preliminary examination, which was set for Wednesday. The physician emphatically denied the charge and offered proof during a hearing before a coroner's jury yesterday that the charge was untrue. The jury failed to fix the blame for the death of the woman,"

The Los Angeles Times of February 19th says: "After listening to a plea from his sweetheart. Miss Beatrice Elder, with whom he was living at the Lee Hotel, No. 822 West Sixth street, to stop his heavy drinking, Dr. Porter H. Carpenter, 34 years of age, seized a revolver from a dresser and shot himself. Rushed to the Receiving Hospital, Dr. Carpenter, according to police surgeons who treated him, has small chance of recovery. The heavy caliber bullet, they say, passed into the left chest near the heart, and came out under his left arm. Released from an institution for drinkers just a week ago, Dr. Carpenter, according to what the police were able to learn from his mother, Mrs. Ella Carpenter, of No. 554 South Hope street, was unable to resist the temptation to drink." Carpenter had written a long note to his mother, who lives at the Bible Institute. declaring himself to be a moral failure. Dr. Carpenter graduated from the Medical Department of the Iowa State University in 1910, was licensed in California in 1914 and had been practicing in Monrovia.

The San Francisco Exmaniner says: "Dr. Winslow Anderson, owner of St. Winifred's Hospital, 1065 Sutter street. will have to pay \$15,000 to C. H. Gildersleeve of Napa, and his wife, Lulu, because a jury in Judge Flood's court accepted the testimony of the plaintiffs that the surgeon left a surgical sponge in the incision after a capital operation on Mrs. Gildersleeve in August, 1915. The verdict was brought in last night at the close of a trial which has lasted three weeks. Damages asked were \$15,000 for Mrs. Gildersleeve and \$10,000 for the husband. The verdict gave \$10,000 to the wife and \$5,000 to the husband for the loss of his wife's duties as a housewife. Testimony was given to prove that Mrs. Gildersleeve suffered considerably after the operation. months later she was operated upon again, by another surgeon. The surgical sponge was then found. Ever since, Mrs. Gildersleeve has been a semi-invalid. Dr. Anderson claimed she had been operated upon many times before she came to him, and that the sponge had been left by some other surgeon.''

# X-Ray Laboratory

Special attention paid to

Radiography of the Chest and Gastro-Intestinal Tract

X-RAY DEPARTMENT of the CALIFORNIA HOSPITAL

#### **BOOK REVIEWS**

"THE MORTALITY FROM CANCER AND OTHER MALIGNANT TUMORS" in the registration area of the United States, 1914. Published by Department of Commerce, Bureau of the Census, Washington.

This monograph presents, in greater detail than has been shown in the annual mortality reports of the Bureau of the Census, statistics of deaths which occured in the registration area during the year 1914 and which were reported as due to cancer and other malignant tumors.

From its perusal, it would seem that much of the diagnosis of cancer is very loosely made.

MATERIA MEDICA AND THERAPEUTICS. Including Pharmacy and Pharmacology. By Reynold Webb Wilcox, M.A., M.D., LL.D., D.C.L. Ninth edition. Revised in accordance with the U. S. Pharmacopoeia, IX. With index of symptoms and diseases. Philadelphia: P. Blakiston's Son & Co., 1012 Walnut Street, 1917. Price, \$3.50 net.

This admirable textbook and brief reference work gives evidence of its popularity through now appearing in the ninth edition. The appearance of the U. S. Pharmacopoeia, IX, has necessitated a rewriting of the section devoted to Pharmacy and Materia Medica and a thorough revision of the volume. There are convenient cross references and an exhaustive index, making the work especially convenient for reference.

HUGHES' PRACTICE OF MEDICINE. Including a section on Mental Diseases, and one on Diseases of the Skin. Eleventh edition revised and enlarged. By R. J. E. Scott, M.A., B.C.L., M.D. With 63 illustrations. Philadelphia: P. Blakiston's Son & Co., 1012 Walnut Street. Price, \$3.00 net.

The tenth edition of this work underwent a thorough revision; the call for another edition now renders it possible to incorporate much new material as well as to make such changes as are necessitated by the advances of Medi-

cal Science. New articles will be found on Syphilis, Heart-Block, Kala-Azar, Rocky Mountain Spotted Fever, Milk Sickness, Acute Febrile Jaundice, Erythremia, and Vincent's Angina. Important additions have been made to several chapters, among which may be mentioned the paragraphs on Blood-Pressure, the Color Index of the Blood, the Dietetic Treatment of Diabetes Mellitus, Lambert's Treatment of Narcotic Addiction, Coleman's High Calorie Diet in Typhoid and Other Fevers, Typhoid State, the Etiology of Typhus Fever, Russo's Test, the Vitamine Theory of Rickets, Schick's Reaction, MacEwen's Sign, Brudzinski's Sign, the Use of Vaccines, and the Period of Quarantine for Most of the Communicable Diseases. Some new prescriptions have been added, and a few of the old ones have been omitted.

CLINICAL AND LABORATORY TECHNIC. By H. L. McNeil, A.B., M.D., Adjunct Professor of Medicine and Instructor in Physical Diagnosis, University of Texas Medical School, Galveston, Texas. Illustrated. St. Louis: C. V. Mosby Company, 1916. Price, \$1.

The triad of history taking, physical diagnosis, and laboratory analysis is presented in practical form within the 88 pages of this little volume.

APPLIED BACTERIOLOGY FOR NURSES. By Charles F. Bolduan, M.D., Director, Bureau of Puolic Health, Department of Health, City of New York; and Marie Grund, M.D., Bacteriologist, Research Laboratory, Department of Health, City of New York. Second edition thoroughly revised. 12mo. 188 pages, illustrated. Philadelphia and London: W. B. Saunders Company, 1916. Cloth, \$1.50 net.

In the present edition the text has been revised to include the scientific discoveries of the past few years. There has been added a chapter on inflammation and one on quarantine, and a brief note on the pathology of the more important infections. The follow-

# Stanolind

Trade Mark Reg. U. S. Pat. Off.

### Liquid Paraffin

(Medium Heavy)

Tasteless - Odorless --Colorless

# Before Operation

Stanolind Liquid Paraffin is an ideal laxative for surgical practice.

When used in the proper dose, it thoroughly empties the alimentary canal, without producing irritation or other undesigable effects.

is particularly valuable in intestinal surgery, because it leaves the stomach and bowels in a quiet state, and because its use is not followed by an increased tendency to constipation.

After an abdominal operation, one or two ounces of Stanolind Liquid Paraffin may be given through a tube while the patient is still under the anaesthetic, or as an emulsion, an hour or two later.

Stanolind Liquid Paraffin is essentially bland in its action, causing a minimum amount of irritation while in stomach or intestine. It may also in most cases be gradually reduced without apparently affecting the frequency of the evacuations.

A trial quantity with informative booklet will be sent on request.

Standard Oil Company

72 W. Adams St. Chicago, U. S. A.

74b

The state of the s



ing diseases are attributed to the filterable viruses: — Measles, hydrophobia, poliomyelitis, yellow fever, dengue, foot-and-mouth disease, rinderpest, and hog cholera.

PRACTICAL URINALYSIS. By B. G. R. Williams, M.D., Director Wabash Valley Research Laboratory, Author of "Laboratory Methods," etc. Illustrated. St. Louis: C. V. Mosby Company, 1916. Price, \$1.25.

A clearly written little manual, covering the subject in 142 pages.

SUGGESTIVE THERAPEUTICS. Handbook of Suggestive Therapeutics, applied Hypnotism, Psychic Science. A manual of practical psychothcrapy, designed especially for the practitioner of medicine, surgery, and dentistry. By Henry S. Munro, M.D., Dinaha, Neb. Fourth edition, revised and enlarged. St. Louis: C. V. Mosby Company, 1917. Price, \$5.

There is so much that is interesting in this volume that it is difficult to make a selection. What do you think of this:—

"After two people of the opposite sex have become self-sustaining, at an age anywhere from twenty to ninety years of age, the possibilities of a permanent marriage union should proceed thus:

- 1. Mutual attraction, psychic and physical.
- 2. Congeniality and mutual admiration.
- 3. Mutual sympathy, and harmony of ideas and ideals.
  - 4. Likes and dislikes are similar.
  - 5. Comradeship, based on confidence.
  - 6. Understanding.
- 7. Friendship, or the desire to be of mutual help.
- 8. They seek each other as a means of relief from solitude, and for participating in mutual social pleasures.
- 9. A developed feeling of mutual dependence.
- 10. Similar aspirations for the future.
- 11. They become engaged to be married.

- 12. The result is progress in all that binds.
- 13. They begin similar development along intellectual pursuits.
- 14. The end is peace, constant growth, development, and an ever increasing love of life."

Don't you think the suggestion is attractive?

NEWER METHODS OF BLOOD AND URINE CHEMISTRY. By R. B. H. Gradwohl, M.D., Director of the Pasteur Institute of St. Louis and the Gradwohl Biological Laboratories, St. Louis; and A. J. Elalvas, assistant in the same; some technician in pathological chemical laboratories, New York Post-graduate Medical School and Hospital; and former assistant, Chemical Laboratory, St. Luke's Hospital, New York City. With St. illustrations and four color plates. St. Louis: C. V. Mosty Company, 1917. Price, \$2.50.

"This is the latest book on blood and urine chemistry and it covers the subject quite thoroughly. It is eminently scientific and also practical.

#### Southern California

# PRACTITIONER \$2.00 PER YEAR

1414 S. Hope St., Los Angeles



# RADIUM SULPHUR SPRINGS NATURAL RADIO-ACTIVE MINERAL WATER It Sparkles and Foams Like Champagne

Hot Baths and Treatments cure Rheumatism, Sclatics, Neuritis, Paralysis, Locomotor Ataxia, Poor Circulation, Heart, Stomach, Liver, Kidney, Diabetes, Bright's, Blood and Nervous Diseases, Female Troubles. Doctor's advice free. Water delivered. Send for Booklet.

Melrose Ave. Cars Direct to Springs, Los Angeles



Vol. XXXII.

LOS ANGELES, APRIL, 1917

No. 4

Editor,

DR. GEO. E. MALSBARY.

Associate Editors.

Dr. Walter Lindley, Dr. W. W. Wakkins, Dr. Ross Moore, Dr. George L. Cole, Dr. Cecil E. Reynolds, Dr. William A. Edwards, Dr. Andrew W. Morton, Dr. H. D'Arcy Power, Dr. B. J. O'Neill, Dr. Otto G. Wicherski, Dr. Charles H. Whitman, Dr. Edward T. Dillon, Dr. C. G. Stivers, Dr. Boardman Reed, Dr. W. H. Dudley, Dr. J. M. Mathews, Dr. A. J. Cook.

#### AMBITION, EGOTISM AND THE SOCIAL INSTINCT

BY CECIL E. REYNOLDS, M.D., MEMBERS OF THE ROYAL COLLEGE CF SURGEONS OF ENGLAND; LICENTIAGE OF THE ROYAL COLLEGE OF PHYSICIANS OF LONDON; DIPLOMAT IN PUBLIC HEALTH OF CAMBRIDGE UNIVERSITY; FECLOY OF THE ROYAL INSTITUTE OF PUBLIC HEALTH OF LONDON;

The highest aim of human life is to live as far as is logically possible in harmony with the main mass of one's fellow creatures and to direct such energies as one is born with to helping humanity to overcome the resistant forces of Nature, by devotion to a specialized duty whereby the whole community is benefited helped in its struggle towards power, happiness and perpetuation; for which purpose Nature has gathered up the undifferentiated energy of this Sphere into innumerable units of highly specialized energy known as the consciousness of the human race. This said energy manifesting itself in its kinetic form, when purposively directed, is known as Ambition and is liable to certain disorders, viz., it may be diminished or perverted.

In order that consciousness shall manifest itself in conduct, it must have

as a medium a brain that is capable of receiving and retaining, for at least a brief period, impressions from the outside world. It is not necessary for the purpose of this article to enter into the physiological details of the brain as a reflex organ, but were it not for the power of Attention and Memory, the reactions of the brain would differ only. in degree of complexity from those of the spinal cord, which will draw away a leg from a flame in a decapitated animal. However, centuries of Evolution have built up in our brains the power to produce an affective state of consciousness known as feeling, and under normal conditions feeling is the more pleasant when the organism is reacting adequately to its environment and unpleasant when the reverse is the case, and the more the ancestral as well as personal profit from experience and the more attentive to experience the race

has been in the past, the more accurate a guide to conduct is feeling in the present generation. Under normal conditions, then, when an impression is received from the outside world into the receptive areas of the brain, it either gives rise to conduct or it remains without visible reaction and enhances the feeling that it produced upon its entry, and for this reason painful impressions that are not dissipated in the converted form of conduct are liable to remain deep in memory and later give rise to "nervous" symptoms, unless their energy is converted through the noëtic consciousness into logic (which is "comparison" and requires the exercise of active attention. Even the simple painful impressions, such as a burn, can, like the emotions, be disposed of by attention. In the case of the emotions this process is called sub-. Imation. When conduct results, its anature is determined by the degree to which attention and memory are developed in the individual.

Artention. The degree of attention to a given stimulus depends upon the quality of the receptive part of the brain, i. e., its capacity for being adequately impressed and the resultant feeling prevents the stimulus from passing over to other centers involuntarily, or of dissipating itself in purposeless conduct or being ousted by other stimuli until the feeling evoked has had adequate relief either by conduct or comparison (abstract concepts) or both, producing an obverse state of feeling. A successful issue by "comparison," of a painful effect is known as sublimation. Various correlated memories are required for comparison.

Memory depends upon the impressability of the receptive cells and upon the length of time the energy is therein concentrated by the power of attention which in turn is dependent on the degree of feeling evoked. (throwback)

Recalled Memory depends upon the power of the "soul" (by attention) to

stimulate into action an impressed group of brain cells to an extent that all the other cortical cells, that were impressed at the time the original stimulus was first received, are also energized (into katabolism). This is called "association" and is produced through the medium of the association centers, association fibres and synapses. all of which are clearly demonstrable in the brain. Put in another way, the energy produced by the katabolism of the group of cells first impressed with the stimulus (concrete concept) katabolizes the associated groups in the same manner as when they were originally stimulated and producing identical feeling.

Feeling is therefore the most fundamental part of the human being. It is the only mental phenomenon, method and workings of which we can form no visual concept whatever. can visualize the processes of association, of comparison, and in fact of everything reflex, but not feeling. It is stored-up feeling that has the remarkable property of being able to bring about Active Attention and in doing so can cause katabolism of the brain cells apparently without immediate stimulus from the world. It is "feeling" which holds in check the various stimuli and prevents conduct from ensuing until due comparisons have been made. It, therefore, through the tutelage of experience and the aid of memory, is the nucleus of inhibition. Were it not for this fundamental fact of "feeling" there is nothing in human conduct that could not be explained by regarding it as a complicated series of reflex actions. As it is, one is forced to admit the existence of a soul, constantly urging the brain to react adequately to the stimuli of this world during its sojourn herein for the attainment of an ultimate end we cannot guess at, a fact that the egotists of all ages have taken for granted. It has been stated that if all stimuli are removed from the out-

side world that consciousness ceases, but the experience of those who, either in dying condition or when under the influence of certain drugs, are absolutely without sight, hearing, or sense of possession of a body or environment, yet are still capable of keen logical reasoning, would seem to disprove this. In my own case, a concise form of logical reasoning that I indulged in under ether, I repeated aloud before full return of consciousness, and hence was able from the report of others to check up its accurate character. The reasoning was done just before complete deep anesthesia and long after all bodily function and feeling, and all sense of environment was completely lost. This is the opposite to what is taught as the usual "march" of anesthesia.

The more impressionable the brain. the greater the feeling and the greater the "urge" to conduct immediate or remote, wholesale or retail. Until decision is made there is unpleasant feeling and after decision is made and conduct has resulted there is still feeling, but as a rule pleasant. This feeling is no necessary part of the reflex-it is a thing apart—it is the soul; that in the case of an imbecile has missed ninetenths of its opportunity of life on this plane. Inefficiency of the brain as an organ of reception is characterized by apathy and inefficiency of the brain as an organ for choice and subsequent conduct is characterized by feelings of fear, which are proportionate to the efficiency of the reception side of the brain in the same individual.

Returning now to Ambition, which is the result of the feeling which is evoked by impressions reaching the brain, it will readily be seen that diminished ambition is caused by anything that prevents the brain from being an efficient organ of reception, such as imbecility, dementia, some cases of blindness and deafness, and certain drugs, such as the bromides, but diminished evidence of ambition may be due

to inability to make a choice of the various impressions that have aroused adequate feeling, chiefly due to deficient "experience-memory" or to faulty explanations of memories in persons who "can't make up their minds;" these are often very numerous and complex and argue a bad early environment. This indecision is usually accompanied by fear, hence the phobias. Again apparently diminished ambition may be due to the fact that the feeling that has been quite adequately aroused can be satisfied by comparisons rather than by active conduct, such as one sees in arm-chair philosophers and in a mild degree in tobacco smokers. The feeling has to be proportionately greater to induce the arm-chair philosopher to commit his comparisons to paper. As a rule, however, the energy is dissipated in making far more comparisons than are requisite for appropriate immediate conduct and feeling is thereby satisfied, by which I mean that the sense of discomfort caused by stored up energy ceases. Of course it is probable that the comparisons thus made may be extremely valuable for subsequent remote conduct, or they may

The kind of aim that induces pleasurable feeling in its attainment and the degree of pleasure experienced is very largely a matter of heredity. Much apparently diminished ambition is in reality due to perversions of energy and the energy is perverted primarily by a failure of attention to the whole environment with an exaggerated attention to certain parts of the environment leading in a vicious circle to distortion of feeling. A good example of lack of ambition due to this cause is that produced by self abuse. The actual bodily asthenia so caused is insignificant as an ambition-destroyer compared with the fact that the attention has been diverted from the world to the inward fautasies, which "feeling" constantly endeavors to magnify and enhance because of their essentially unsatisfactory nature (so long as any power of comparisons with the real world remains.) Abnormal self love ensues, and the energy thus used is diverted from ambition. The picture produced resembles the egocentric paranoiae and is designated as a paranoid state, one degree of which is called schizo-phrenia. When this is combined with a hereditary nervous instability there is later an absolute loss of "vis a tergo" and the result is such as one sees in hebephrenia and katatonia in its later stages. Clinically almost indistinguishable its curability depends on the heredity. Many such cases, however, could be prevented in spite of their bad heredity if the attention was properly directed in the earliest years and the habit of making constant comparisons of the items of immediate environment instilled early in life.

Other causes of absolute diminution of ambition are organic dementias, drugs, such as morphine bromides and all anaphrodisiacs and imbecility in which there is a defect of reception. Ambition in its relation to egotism and the social instinct is much wider in its scope and importance for the reason that for every one person suffering from a pathological lack of ambition, there are one thousand suffering from perverted ambition. Ambition is perverted when its energies are directed at the acquisition of power for selfaggrandizement rather than for the benefit of society, and the most offensive form of this is in those individuals who, whilst seeking self-aggrandizement, firmly believe that they are entirely actuated by altruistic motives. The extreme individuals of this class are known as Mattoids or eccentric paranoiacs and to this class belong the religious cranks, reformers and devotees of all the various isms. their premises are false they are, of course, useless to society. Into this class I cannot yet put the Christian Scientists who profess to endeavor to relieve the sum of human suffering by teaching to their own advantage a delusionary habit of dissociation, by which I mean they teach people to dissociate from consciousness the two great danger signals of maladjustment between the individual and his environment, to-wit: "Fear and pain" (the normal and abnormal of which I shall discuss later). These same Christian Scientists may be laying up for future generations a crop of insanity by developing a habit of dissociation which we know is at the bottom of hysteria, or perhaps when their pendulum has returned from the sky and they have regained their respect for organic disorders they may be found to have done good by having annihilated unjustifiable fear and pain by developing the power of dissociation under control of will (i. e., by attention). This, however, cannot be until they have divorced the good of their principles from the religious superstition and dependency to which they are now attached. Turning to those ambitions which have been perverted into egotism with a more honest face we can cite numerous classical examples in history and drama. Let us take the case of King Lear. His egotism is manifested at the commencement of the play for he demands the flattery of his daughters and swallows the hypocrisy of Goneril and Regan wholesale. Upon receiving a rational and virtuous answer from Cor delia he disinherits her most unjustly. Even granting him the excuse of senility the senile do not become gross egotists unless it has been their mental habit in the past, however well suppressed. And therefore I disagree with most commentators who say that Lear was essentially magnanimous and noble and consider it impossible that so inflated an ego could have contained a great leader.

It was perverted ambition that

Brutus accused Caesar of and Antony endeavored to disprove by reading Caesar's democratic will.

The question at once comes to mind as to what is the position of a great financier and capitalist as regards ambition, egotism, and the social instinct? Naturally individuals vary, but as a rule great financiers have a pretty good idea of social obligation and they quite properly argue that whilst enriching themselves they are building up big industries that benefit the community. This is true, but the great fault is in their methods which are too Sudden. If each financier had 300 years in which to build up the industry he could afford to pay labor handsomely, but as man's life is only three score years and ten, he has to sweat his workers to get anything like personal satisfaction in that time and there's the rub. Time is too valuable, labor too cheap, and ostentation too popular. If man could be content with the satisfaction of feeling how much benefit he had bestowed on the world, rather than of how much means of self-aggrandizement his labours brought, his ambition would be more normal. Many a capitalist could have his "enough" and all his workers have their "enough" and he still retain the recognition of the world and complete satisfaction of accomplishment without becoming bloated at the expense of others. The essential fault is that egotism induces too much haste. The former is ample reward for his initiative. I mention this as an example of the most widespread disorder of ambition. The root of all social evil is therefore, Egotism, and before considering its origin, I will again point out its widespread Nature.

- 1. In every "Drunk" it is palpable—the alcoholic seeks self-aggrandizement and self-gratification, and although he may lose money by carelessness he is not often prone to give anything away.
  - 2. The infant is entirely egotistical.

- 3. The Egocentric paranoiac strives to be on a plane above his fellows and succeeds in reaching a plane apart from his fellows.
- 4. The eccentric paranoiac tries to convert every one to his pet "ism" because his social instinct is of such quality that he cannot conceive of his opponents having any justice in their point of view—the big ego attends of course.
- 5. The Dementia Praecox case is notoriously seclusive and dementia praecox is an atavstic disease and many of the cases have physical stigmata closely resembling the ape—especially in the hands.
- 6. The Rich man whose egotism I have tried to generalize upon.
  - 7. The Criminal.

The reason why egotism is so widespread and deeply rooted in the human, when it is absent in the bee and the ant, is that although our immediate ape ancestors were gregarious our remote ape ancestors were not. Of the apes extant that are not gregarious the most notable is the gorilla. He has for centuries been a paired-off inhabitant of the deepest forests and, having remained so, he has hardly progressed at all. The gregarious baboon is far more intelligent. Hence, when man suffers from a simian disease like Dementia Praecox, he reverts back to the solitary animal and becomes seclusive and often very savage-in other words when a man degenerates he does not become a new creature, he reverts to the infancy of his race.

The miser is another good example of reversion of the mind to the solitary beast type, that knowing nothing of the interdependence of social energy has the instinct to store up as much food as possible, very deeply rooted in consciousness. The greatest egotists are manufactured by their mothers. Mother's only darling boy very early begins to reason that what mother considers the most beautiful and wonder-

ful thing in the world: viz, himself, must in fact be so, and he begins to pay detailed attention to himself in preference to his surroundings. He may thus become a "narcissus" or, if he ever progresses far enough to project any feelings out upon his fellow creatures he selects for a sexual aim that which most nearly resembles his idol: viz. one of his own sex. As these creatures are always more sexualized than socialized (because social instinct is not taught by pampering,) they soon find that their position in society is untenable and the repression mechanism comes into operation too soon for the feeling to be converted into social instinct. The result is that these feelings are converted into wild fantastic religious and pseudo-artistic manifestations circling around the inflated ego and the result is the true paranoiac. Delusions of persecution follow as a logical result of the repression of feeling plus the actual estrangement of society. These people from the first form judgments on feeling rather than on thought and it is their utter inability to divorce feeling from thought or to utilize feeling as thought that makes their false conclusions so unshakeable. The paranoiac, then, has a perversion of feeling attended by defects of judgment which lead him to see justice in egotism instead of perceiving it in social obligation.

He believes that his conduct, however wrong, is justified in the eyes of God and would be justified in the eyes of men if they had sufficient understanding, but the poor things can't be expected to as they are on a lower plane to himself—hence they persecute him.

The criminal, on the other hand, suffers from a lack of feeling and although he realizes that his conduct is wrong by all standards, he does not care. Also he makes deliberate choice. Both paranoiae and criminal lack that sort of feeling known as social instinct,

and in border line cases it is difficult to separate one from the other. dangerous both are better chloroformed. A good guide is the sense of humor which some criminals have, for it is noteworthy that parapoiacs are, without exception, devoid of a sense of humor, and such pleasure as they express by laughing is caused by a false sense of superiority to their fellows. In this respect they are of course only different from the normal in their premises because much of the laughter that normal man expends over Charlie Chaplin is due to the sense of superiority that he feels toward the conduct of the figure on the screen-a fact of which Mr. Chaplin himself has always been fully aware. This brings us to the interesting question as to why in the realm of the sane some men are great humorists and others not. I have come to the conclusion that the humorist is one who in early life was prone to form judgments on feeling, but thought and attention prevailing has come to regard his own feelings hypercritically and the feeling and conduct of others analytically. Great comedians are usually sensitive. Hence the sense of humor is the greatest sanity and the true comedian does more than all the alienists ever born to preserve the sanity of nations, hence their popularity for there is one man who knows better than any man what is his present need and that is Everyman, and he is paying millions of dollars to see Chaplin, and even though he may not analyze the detailed purpose of the business, he instinctively feels that the pervading spirit of the picture upholds optimism. ridicules innumerable forms of deleterious conduct, and preaches the gospel of controlled feeling with the greatest economy of thought.

As I find myself using the word "feeling" in its common wider sense instead, as in the earlier part of this paper, of the ultimate analysis of Consciousness, I will enter a little further

into the different types of "feeling." Leaving out of the discussion the "sensations" which are of many kinds, "feeling" ultimately resolves itself into the pleasant or unpleasant. Instincts are inherited "memories" or racial habits and opposition to them produces emotions.

The emotions consist of a simple unpleasant feeling from the urge to act (desire) or a simple pleasant feeling of relief due to action commenced plus a varying quantity of knowledge that has a direct relation to the aforesaid pleasure or displeasure. In technical language one would say that the emotions consist of varying amount of affective and noetic consciousness. There appears to be a surcharge of energy in the sensory part of the brain during an emotion and unless it finds an adequate discharge through the motor system it makes a proportionately greater effort at discharge through the vago-sympathetic system, or it is dealt with in consciousness. The vago-sympathetic symptoms create sensations—heart palpitations, sweating, goose-flesh, etc.

Returning from the domain of physiology, into which the last paragraph took us, to the region of psychology again, we are able to state that the more incapable of reaction to the situation the individual is, the more unpleasant the feeling. If the situation is amenable to immediate remedy by conduct and the noetic consciousness has been sufficiently developed by experience the energy may be taken from the affective consciousness by the noetic and discharged as conduct which not only gives relief but itself brings sensations causing feeling of satisfaction and fresh experience; or, the noetic consciousness may relieve the affective consciousness of its burden by utilizing the energy through the medium of attention and experience memories in making comparisons, in other words by reasoning; (this process is a form of sublimation.) Or, the energy may remain in the affective consciousness for long periods of time and react upon the body in various ways and produce various abnormal forms of conduct, then discharging itself in driblets.

The result in fact depends upon the situation and the individual's past attention to values. If the energy discharges itself direct from the affective consciousness, without the intervention of the noetic consciousness, into the motor centers of the brain the patient has a "fit." If the intervention of the noetic consciousness is incomplete and the energy passes in small driblets from the affective consciousness direct to the motor centers the patient suffers from "tic." Hence it will be noticed that many "fits" and "tics" have a definite meaning in the affective consciousness in terms of experience.

I will give a crude example of the above conception. Child A. loses his He weeps copiously and pet cat. thereby brings his mother to side with a large box of candy, thereafter he no longer feels a sense of irreparable loss. Child B. loses his cat, but his experience and attention has been such that he realizes that one cat is very like another, and he dissipates the energy of the emotion without any conduct and by comparisons alone, albeit he was fond of the cat. He argues he can get fond of another cat. Child C. of equal impressability and devoted to his cat, not only is without B's experience but knows that he will be whipped if the loss of the cat is discovered and he "stifles" his emotion. His affective consciousness remains surcharged even for years. This energy is prone to discharge whenever a stimulus reaches the noetic consciousness in any way associated with the painful experience; and it would be likely to discharge in a manner inappropriate to the present, but quite logical in relation to the dead cat of long ago. Consequently his conduct would appear irrational and be labelled hysteria. In other words he abreacts.

The terms affective and noetic are merely used to render the different placements of feeling more comprehensible and more easily handled in argument, but reflection shows that we can know nothing that we have not first felt, and hence consciousness is reduced to one conception "feeling," which defies further analysis beyond saying that the sum of the soul's receipts from this world are in terms of pleasantness or unpleasantness, according to the aims sought and the ends attained by its instrument—the human organism.

Pleasant feeling in the face of faulty adjustment to environment only persists in some phases of insanity and drug addiction. Pleasure sought for pleasure's sake brings no pleasure in its wake.

It is well to point out here that not only can the emotions be disbursed by attention, but that the unpleasantness due to sensations of pain can be disposed of by attention and even negatived.

As before stated a further analysis of pleasantness is impossible, but another fundamental condition producing it may be cited. We may say that feeling is pleasant when the experience memories coincide with the "primal urge," which is the same thing as to say that there should be no affect-producing conflict between the "urge and the noetic."

This brings us to the definition of the 'Primal urge'' which is a word coined for the present purpose, and by which I mean the undifferentiated energy we started life with and which my best judgment leads me to feel, is a thing apart from the effect of stimuli reaching the brain and apart from the changes which the energy so aroused undergoes after the said stimuli reach the brain. It will be at once objected

that this alleged fundamental energy or urge is nothing beyond an ability to react. Even the spermatozoon can react to the electro-chemical attraction of the ovum, and even the ions of which they are composed are subject to electrical changes in the imponderable ether. This appears to me to be restating the proposition in terms of itself because we can theoretically continue to subdivide reactable matter until we are reduced to the imponderable ether itself-call it cosmos or what you please; it helps little in the solution of the problem are we merely organs through which a continual flow of energy passes and we the temporary tools of an energy of which we subsequently form no part; or, have we in us a permanent store or entity of energy that will persist and will gather force from each succeeding life, until, as the theosophists would say, it is reabsorbed into a cosmic whole thus changed by specialization? It would appear that theologists of all ages have had an idea of the primal urge because they speak so persistently of the "Trinity" which I take to be the equivalent of the "The primal urge; the affective consciousness; and the noetic consciousness. Three in one and one in three-it cannot be denied. Another interesting physiological fact which has a bearing on this discussion is that when action, such as walking or riding, becomes automatic, consciousness in that respect ceases, and, were it not for the fact that the more apt and automatic we become, the more do we create increasing complexities in interhuman relations, we should theoretically become unconscious altogether. Fortunately the former is the case, and with increasing conflict comes the growth of consciousness and I cannot resist the belief (however paranoid it may sound), that consciousness will increase until it solves the problem of its own immortality.

As to whether that belief is paranoid

or no I will leave to the critics and their decision will depend on whether they judge the conclusion to have been arrived at mainly by thought or by feeling.

My belief is supported in various forms, however, by "Everyman," who is on the whole "Theistic."

In conclusion I would say that a work-a-day exposition of many of the principles put forth in this paper may be seen in vivid form in the greatest drama of the age "Experience" by Mr. George V. Hobart, which is, in my opinion, a masterpiece of psychological truth as far as language can conveniently allow, and a triumph of dramatic construction.

All friends of education are rejoicing at the announcement made recently by President Bovard that the University of Southern California had purchased all the property between the present University Campus and Exposition Park. We want the University and its uplifting influence right here in our city.

# A CLINICAL CONSIDERATION OF MIGRAINE.

By John A. Litchy. M.Ph., M.D., Pittsburgh, Pa.

Migraine is considered by the author as the most frequent headache, occuring in 700 of his 15,000 patients sick from all causes. He believes that the so-called acidosis in children may often be a forerunner of a well established sick headacne habit. The interesting relation between Migraine and epilepsy Among the deserve further study. author's 15,000 patients epilepsy occurred in 7, and both migraine and epilepsy in 70. Auerbach's theory which attributes migraine to an actual disproportion between skull-capacity and volume of brain, needs further proof. In the International Clinics for December Dr. Litchy shows that the diagnosis is easy when there are head-

aches which are unilateral, periodical and hereditary, but when only one or two of these symptoms are present, or when there is only a periodicity of some of the minor symptoms or possibly of the aurae, the diagnosis may be difficult. Migraine is frequently mistaken for pelvic disease, for acidosis or cyclical vomiting in children, and organic disease, when some of the aurae are present. The psychasthenic and the gastric symptoms frequently lead to confusion in diagnosis. While the underlying causes of migraine are vague and furnish little light as to treatment, much can be done to ameliorate the symptoms by proper handling of the exciting causes that aggravate the patient's general condition and precipitate the attacks. thorough investigation and careful individualization are indicated. Systematic administration of the bromide salts and avoidance of undue fatigue are especially recommended.

#### A GOLDEN ANNIVERSARY.

In 1867 Hayden's Viburnum Compound was established and first offered to the medical profession, and while no particular celebration is taking place in view of the fact that this product has been before the doctors of this country for 50 years, nevertheless, it is but an evidence of its therapeutic stability and reliability.

In 50 years many products have come and gone, while H. V. C. enjoys the extending confidence of thousands of discriminating clinicians. The great Sims, the Father of Gynecology, thought so well of Hayden's Viburnum Compound, that he not only prescribed it, but referred to it in his writings.

Its dependablity where particularly indicated, such as in Dysmenorrhea, Amenorrhea, Menorrhagia, Rigid Os, and other gynecological and obstetrical conditions, will be found just as satisfactory today, as in the time of Sims.



A MEDICAL, CLIMATOLOGICAL AND SOCIOLOGICAL MONTHLY MAGAZINE.

This journal endeavors to mirror the progress of the profession of California and Arizona.

Established in 1886 by Walter Lindley, M.D., LL.D. DR. GEORGE E. MALSBARY, Editor and Publisher.

Associate Editors,
Dr. Walter Lindley, Dr. W. W. Watkins, Dr. Ross Moore, Dr. George L. Cole,
Dr. Cecil E. Reynolds, Dr. William A. Edwards, Dr. Andrew W. Morton,
Dr. H. D'Arcy Power, Dr. B. J. O'Neill, Dr. Otto G. Wicherski,
Dr. Charles H. Whitman, Dr. Edward T. Dillon, Dr. C. G.
Stivers, Dr. Boardman Reed, Dr. W. H. Dudley,
Dr. J. M. Mathews, Dr. A. J. Cook.

Address all communications and manuscripts to
EDITOR SOUTHERN CALIFORNIA PRACTITIONER,
Subscription Price, per annum, \$2.00. 1414 South Hope Street, Los Angeles, Cal.

#### EDITORIAL

## MEDICAL MEN AND MILITARY SERVICE.

Whatever may be the individual opinions of members of the medical profession as to the advisability of war, since war has been declared forced upon us, there will be found no discordant note among medical men. In fact, at the present moment there is probably not a medical man that would be accepted who is not seriously contemplating entering the military service. The great variety of service open to medical men in the various departments of the army and navy, state and federal, affords ample opportunity for personal selection so as to best develop all of our ability. We sometimes wonder if the younger men of the present in any wise fully appreciate their opportunities. Our army and navy are to be increased rapidly and will remain much larger than heretofore. So that those who enter the service early will have a very great advantage in the way of advancement, since no little stress is laid on seniority of service. Of course, we may expect at least the usual amount of advancement through apparent unjust preferment, but in a way that only adds to the spice of military life. Here's hoping there will not be too much such spice.

What should you study? Of course you will master your military manual, and bring up to date your knowledge of military surgery, sanitation and hygiene-especially military sanitation and hygiene. Talk the matter over with the medical officer at your nearest post, tell him your efficiencies and deficiencies, and he will advise you how to go about making yourself more proficient, which will make you all the better prepared to meet the emergencies of either military or civil practice. After all, there is not so great difference between military and civil medical practice, with the two great exceptions that in military practice the medical men give greater attention to preventive medicine than in civil practice, though not more than they should give in civil practice if they are truly mindful of their duty as physicians. And in military service the central idea is the early return of the patient to service, especially in active warfare, and this must often take precedence over attempts to prolong life or relieve suffering. Thus during an engagement, preference is given the minor injuries,

so that the largest number may be returned to active duty in the shortest time. But your most important duty will be promoting the effectiveness of the troops by the prevention of disease, for our military forces will suffer greater debility from preventable diseases than from other causes.

#### EDITORIAL NOTES

Dr. Rollin T. Burr, U. S. Army Surgeon, retired, has located in Pomona.

Dr. Harry Ellington Brook is on the editorial staff of the Los Angeles Record.

Dr. C. Van Zwalenburg recently delivered a lecture in Riverside on The Cancer Problem.

Dr. Horace F. Pierce has been appointed surgeon to the principal utility corporations of Santa Barbara.

Dr. David Crise, the well-known practitioner of Escondido, recently suffered from a severe apoplectic attack.

Dr. Lulu Peters, of Los Angeles, is delivering some excellent popular hygienic lectures before various women's clubs.

Drs. Frank Detling and Simon Jesberg have taken offices in the Los Angeles Investment Building at Eighth and Broadway.

March twenty-fifth, Dr. Winslow Anderson of San Francisco and Miss Ethel B. Davie, Superintendent of Nurses of St. Winifred's Hospital, were married.

Winsor Soule has given the Cottage Hospital of Santa Barbara a substantial building, to be erected at his expense at once, for the out patient department.

Dr. Orlando S. Wright, age 87 years, died at his home in San Diego, February first. He had lived in San Diego 43 years and had been a Mason for 67 years.

Dr. C. W. Harvey, of Anaheim, who was charged with murder through an illegal operation, was completely exonerated by the judge before whom the case was tried.

Dr. John R. Haynes in a recent paper on George Washington, gives the opinion that for the last twenty years of his life the Father of our country suffered from pyorrhea.

The Independent Order of Foresters, who have a Sanatorium for the tuberculous about twenty miles from Los Angeles, are also planning to build a hospital within the city limits.

Dr. Lobingier has removed his offices to the Merritt Building, corner of Eighth and Broadway. This palatial structure is probably the most magnificent office building in the world.

Dr. Carl Gehr Parsons, formerly of Denver, died March sixth at his home in Hollywood, Los Angeles. Dr. Parsons was 37 years old, a graduate of the University of California and a member of the Colorado Medical Association.

The Cincinnati Board of Health very wisely requires all persons engaged in the handling and preparation of food in hotels, cafes and drug stores to have a certificate from reputable physicians based upon an annual medical examination as a condition of their employment.

Dr. Frank Billings was the guest of honor at a delightful reception given by Dr. and Mrs. Norman Bridge on the evening of March 30. On the evening of April 2 Dr. Billings gave an interesting address at a special meeting of the Los Angeles County Medical Society.

Goat's milk will be delivered regularly by ringing up "The Goatery," 320 West Avenue 45, Los Angeles. Telephone 31179. Telephone hours 7 to 8 a.m., 6 to 7 p.m. In order to have goat's milk for the babies it is no longer necessary to ask "who has got my goat?"

Dr. Byron Stookey of Los Angeles, Captain Royal Army Medical Corps, Inspector Military Orthopedic Surgery, British Army, etc., is the author of a reprint, Gunsbot Wounds of Peripheral Nerves. This first appeared in Surgery, Gynecology and Obstetrics for December, 1916.

Dr. Silas A. Austin was fined \$25 or twenty-five days in county jail for assisting, it is said, in passing of a baby as a woman's very own when she had secured it from another woman. Such acts are done every now and then with the best of motives but nevertheless they are dangerous.

Dr. David Gochenauer, age 76, well known in Los Angeles and San Diego, died at his home in the latter city, February twentieth. He had been in practise in San Diego for twenty-nine years and was a man of great energy, remarkable executive ability, a prominent Republican and served with honor in the Civil War.

Dr. Hugh Young of Baltimore delivered an interesting address on "The Malignant Growth of the Prostate Gland" at the annual meeting of the Los Angeles Clinic and Pathological Society on the evening of March 14. Dr. Young was also extensively wined and dined by admiring fraters.

The many friends of Dr. J. M. Radebaugh, the dean of the medical profession of Pasadena, will be delighted to know that he is rapidly recovering from an accident that occurred early in March. The doctor fractured his right hip and shoulder blade. For thirty-six years he has, in Pasadena, set a high standard for all other physicians.

The annual meeting of Alienists and Neurologists will be held Monday, July 9th, to Thursday, July 12th, 1917, in the Red Room, La Salle Hotel, Chicago, under the auspices of the Chicago Medical Society. Dr. George A. Zeller will act as Chairman. The program will be mailed June 28th, with abstract of each paper. Contributors to the program are solicited. This is a society without a membership fee. Address, Secretary A. & N., Room 1218, 30 North Michigan Avenue, Chicago.

Major Charles W. Decker, of Los Angeles, acting Chief Surgeon of the California National Guard, says: "Competent young physicians are needed in the National Guard of California for Federal service, with rank and pay of lieutenant. Men of the required military experience can enter with rank of captain. Forty young men of proper qualifications are needed to fill the ranks of Field Hospital No. 1, California National Guard, which is certain to be called into the Federal service soon after Congress has declared a state of war to exist.

Dr. Clifford V. McConnico, widely known physician, died at 3:50 yesterday afternoon after a fight for life that has been watched for weeks with deep concern by hundreds of friends. end came rather suddenly. At 2 o'clock he talked with relatives at the hospital and said he was feeling fairly well. Dr. McConnico was born at Vaiden, Miss. He was 38 years or age and un-He graduated about 1902 married. from the University of Pennsylvania Medical School and practised first in Kentwood, La. In September, 1905, he came to San Bernardino and began the practice that became extensive.

Should the plans of Fred Schiffman, millionaire rancher, and his father, Rudolph Schiffman, retired physician of Pasadena, succeed, California will take the place of Germany and Austria in the production of belladonna, one of the most necessary medical plants in existence. According to Schiffman, almost \$2000 clear profit can be made on each acre planted to belladonna, exclusive of labor and cultivation. Schiffman says the belladonna is valued at \$2.25 a pound for the leaf and \$2.50

for the root and that an acre will yield half a ton of leaf and 600 pounds of root. The plants, he states, must be started in a hot house and take from six weeks to six months to begin growth, while it is necessary to wait until the frost is out of the ground before transplanting. Dr. Rudolph Schiffman, who lives on Grand and Palmetto avenues, is a retired physician, but the war has started him in a series of experiments in growing medicinal plants that have hitherto been exclusively a German importation.

#### **BOOK REVIEWS**

THE BREAST: Its Anomalies, Its Diseases, and Their Treatment. By John B. Deaver, M.D., LL.D., Sc.D., Professor of the Practice of Surgery, University of Pennsylvania; Surgeon-inchief to the German Hospital; Visiting Surgeon to the Hospital of the University of Pennsylvania; Consulting Surgeon to the Germantown Hospital, the Philadelphia General Hospital, Saint Agnes Hospital, and Mount Sinai Hospital, Philadelphia, Pa.; and Joseph McFarland, M.D., Sc.D., Professor of Pathology and Bacteriology in the Medical Department of the University of Pennsylvania; Pathologist to the Philadelphia General Hospital; Fellow of the College of Physicians, Philadelphia, etc., assisted by J. Leon Herman, B.S., M.D., Assistant Surgeon to the Methodist Hospital of Philadelphia; Instructor in Anatomy, Medical School of the University of Pennsylvania. With 8 colored plates and 277 illustrations in text. 1012 Walnut Street, Philadelphia: P. Blakiston's Son & Co. Price, \$9 net.

This work is thorough and authoritative, as we would expect from its eminent authors. We take pleasure in presenting the following extract:—

Roentgen-therapy in the Post-operative Treatment of Corcinoma of the Breast.—It is in this field that we believe the Roentgen rays find their greatest field of usefulness, in the treatment of malignant disease of the breast. It is very difficult to estimate by statistics the exact value of the Roentgen rays in post-operative treatment, because up to the present time, the treatment has been applied almost exclusively in the more advanced cases

in which there was already metastasis to the axilla and sometimes to the supra-clavicular and mediastinal regions. Therefore the results obtained in the past must be compared with the results obtained in the metastatic cases which were operated upon without the effect of the rays, and when this comparison is made I am entirely sure that there will be demonstrated a very decided improvement in the end results. This will be true especially in the cases treated in the past two years since which the technic in Roentgen-therapy has undergone a decided change. However, even during this period, the technic used in general has been most inefficient. When all cases are referred for post-operative treatment we will be in a much better position to estimate its value. When such cases are referred for post-operative treatment, the Roentgenologist should be informed as to whether metastases in the axillary and supra-clavicular regions were or were not found at operation, for we believe that in the cases in which there is no metastasis, the amount of treatment needed will be very much less, and the period during which the treatment will have to be continued after operation will be likewise very much dimin-

ished. The prognosis following operation without Roentgen treatment has been discussed in previous chapters of this book, and therefore need not be repeated here. We believe, however, that the end results can be improved 25 per cent. by thorough, competent, post-operative X-ray treatment. All surgeons recognize the danger of recurrence, and since the foregoing cases, which have been studied by Dr. Deaver and myself over a considerable period of time, show that even extensive, recurrent and metastatic disease may vield to the action of the rays, there can be no doubt as to the influence of the Roentgen rays upon the malignant tissue. If recurrence, the positive evidence of malignant disease, can be made to disappear, then it is surely reasonable to presume that if this disease be treated in its incipient recurrence, or when only a few cells have been left behind or transplanted, that if this treatment be used in time, the chances of recurrence and of the subsequent development of the disease must be very much less. It is generally recognized that if recurrence takes place in the region of the wound, cancer cells have been left behind at the time of operation or have been transplanted. It would seem therefore that the little nodules that one sees, from time to time, develop in the region of the stitch holes argues at once in favor of transplantation. If this were recognized, we would have the strongest possible argument in favor of immediate post-operative treatment in the open wound, and from results that I have observed in this method, I believe that it is a rational procedure providing it can be safely and practically carried out.

I treated my first patient in this manner about three years ago, following an operation for recurrence of carcinoma of the breast. She has remained well these three years. I believe Dr. Foerster of Milwaukee, was

the first to use this method. He has recently written to me that his oldest case has remained well now seven years. Dr. Deaver does not approve of the treatment in the open wound, but urges post-operative treatment in all cases. Werner, who has had considerable experience with post-operative treatment says: "Roentgen exposures are liable to ward off recurrences when applied after operation, especially when the rays can be applied to the open wound." He also says: "Many cases of failure can be ascribed to inadequate dosage." Theilhaber also says: "The probability of success is greater when the rays are applied to the open wound." Rodman advised treatment in the open wound when it is practical.

Argument in Favor of Immediate Post-operative Treatment.-The object of this post-operative treatment is first. to cause the atrophy or destruction of outlying cells or glands that have not been reached by the surgeon, or the destruction of cells that have been transplanted into the wound: second, to cause the obliteration of the lymphatic channels which would otherwise permit the dissemination of the disease. Therefore, the sooner the cells are destroyed or rendered inactive by the rays, the less likelihood will there be of multiplication and further development. This, in itself, forms a strong argument in favor of treatment upon the open wound before suturing, and while the patient is still under ether. As proven, the rays have a destructive effect upon the carcinoma cells, and beneficial effect upon the patient suffering from carcinoma. I need only refer to the cases previously reported in this chapter, as well as to those previously recorded in various scientific contributions made by myself and many others such as Boggs, Krause, Koptzenberg, Freund, etc. It is not always practical to give treatment in the open wound while the patient is still under

ether. In such instances, the treatment should be given as soon after the operation as the patient can be safely moved into the Roentgen treat-When, for any reason, ment room. post-operative Roentgen treatment cannot be given, then treatment should be applied at the earliest sign of recurrence, for a considerable number of cases with recurrences and metastases can be cured, or rendered free from symptoms. Unfortunately, most of the inoperable and advanced cases die of the disease, sooner or later, and their friends and relatives who do not know of its advanced state are apt to ascribe death to the failure of the rays, and sometimes even believe that the rays caused the death of the patient, or even caused her disease.

All Cases should be given Post-operative Roentgen Treatment.—All Roentgenologists and most surgeons are recognizing the value of post-operative Roentgen treatment in the more advanced cases, but few seem to realize the importance of such treatment in cases in which there is no glandular involvement. The best evidence of the value in early cases is that by Dachtler, who as a result of visits to leading hospitals eight years ago to determine the value of post-operative treatment, says:

"I found that whenever unfavorable opinions were given, almost invariably on investigation, faulty methods in technic were discovered. As a rule there was not a hearty cooperation between the surgeon and the Roentgenologist, the Roentgenologist stating that usually only a short series of treatments was given while the patients were in the hospital. After returning home, they either did not come for treatment, or they returned at irregular periods. On the other hand, in some places where the surgeon would have given the method a fair trial, the facilities for Roentgen treatment were sadly inefficient. In some hospitals the

work was in charge of internes, who often had not mastered the first principles of Roentgen-therapy. In other places the protection offered the X-ray operators was so meager that they could not be expected to push the work under conditions which meant grave danger to themselves. In one celebrated institution of learning patients were sent to the X-ray department (which was in charge of inexperienced internes) with a prescription calling for so many minutes of X-ray treatment. lutely no method for measurement of dosage was known or attempted. one large charity hospital, where many cancer patients were treated, post-operative X-ray treatments were given only while the patients remained in the hospital.''

Unfortunately, these criticisms, referring to conditions eight years ago, will apply, in many instances, today.

In Dachtler's work during the past eight years, he was able to obtain the complete cooperation of the surgeons, and bases his report on private cases only in which the subsequent history could be followed, and only treated such cases as would promise to continue the treatment long enough to produce results. All the cases were carefully diagnosed, and in all cases the surgeon reported as to the presence or absence of axillary involvement. says that of the 16 cases showing no axillary glandular involvement at operation 13, or 81 per cent., are alive and well, after five years. Excluding the doubtful cases that died before the five-year period had elapsed, but who were found at autopsy to be free from cancerous disease, the percentage of cures reaches 100 per cent. This is a gain of at least 20 per cent. over the best records yet reported.

Though the number of cases treated by Dachtler is not great, 100 per cent. of cures of cancer is so unusual as to prove the strongest sort of argument for

post-operative treatment in all cases instead of limiting it only to the inoperable or advanced cases which are operated upon with the hope that the rays will eliminate the disease that the surgeon cannot remove. Dachtler believes that the immediate use of the ray on the operating table, or leaving the wound open for treatment before closure, is not necessary, because, according to him, the chief effects of post-operative Roentgen-therapy are the obliteration of the remaining lymphatics and lymphatic glands. In his experience, the X-ray treatment has entirely eliminated skin recurrences after the radical operation for cancer of the breast.

Treatment of the Ovaries .- Theilhaber says: "The genital glands apparently act favorably on the development of cancer, their influence being 'cancrigenous' while the blood-forming or-'cancrilytic' gans possess Therefore, I attempt to produce an atrophy of the sexual glands by Roentgen treatment in women who are still menstruating. Recurrences after the breast amputation is more readily prevented if the ovaries are destroyed, the clinical experience which different operators have had with castration in inoperable carcinoma coinciding with this fact.'' In this treatment of the ovaries for the effect on the breast, I have had no experience, but it seems to me to be worthy of trial, and I hope soon to have the opportunity of testing it.

The same arguments that are given in a previous chapter in this book concerning oöphorectomy as unfavorably influencing the development of carcinoma cells, as well as those conceived by Lett, can be used in favor of Roentgen treatment. Since the same effects on the ovaries can be accomplished by Roentgen-therapy, an operation which has a fatality of 6 per cent. should be avoided. As Lett's results seem to indicate a distinct improvement, and as

this treatment can be so easily given, it would be wise to add ovarian destruction to the treatment of cases whose ovaries are still active.

A REFERENCE HANDBOOK OF THE MEDICAL SCIENCES. Embracing the entire range of scientific and practical medicine and allied science by various writers. First and second editions edited by Albert H. Buck, M.D. Third edition completely revised and rewritten, edited by Thomas Lathrop Stedman, A.M., M.D. Complete in eight volumes. Volume seven. Illustrated by numerous chromolithographs and 469 half-tone and wood engravings. New York: William Wood & Company, 1917.

While the production of medical literature has lagged through excessive European devotion at the shrine of Mars, the great Reference Handbook of the Medical Sciences is nearing the completion of its third edition, a very just and enduring monument of peace in these troublous times, a credit to the profession of America and an honor well merited by its editor and publishers. In this volume Cole presents an admirable article on Roentgen diagnosis, which is well illustrated by excellent plates. There is so much that is admirable in the Reference Handbook that you will be unfortunate if you do not have it in your library. Its list of writers is a veritable honor role of the profession.

# X-Ray Laboratory

Special attention paid to

Radiography of the Chest and Gastro-Intestinal Tract

X-RAY DEPARTMENT of the CALIFORNIA HOSPITAL

### Stanolind

# Trade Mark Reg. U. S. Pat Off. Liquid Paraffin (Medium Heavy)

Tasteless - Odorless - Colorless .

# In Treating Hemorrhoids

S TANOLINI Liquid Paraffin, wood regularly, very generally relieves hemotroods, and fissure, even when of some years standing.

Since these morbid conditions are usually the result of constipation, and are aggravated by straining, Stanolind Liquid Paraffin aids by rendering the intestinal contents less adhesive, by allaying irritation and thus by permitting the diseased tissues to become healed.

Where a contraindication for operative treatment exists, the use of Stanolind Liquid Paraffin in these conditions will frequently give relief from distressing symptoms and may even permit the parts to be restored to a condition where operative procedure may be postponed.

The special advantage of Stanolind Liquid Paraffin lies in the fact that its beneficial effects are not diminished by continual use, as is the case with almost any other laxative.

Stanolind Liquid Paraffin acts by lubrication and by adding bulk to the indigestible intestinal residue.

A trial quantity with informative booklet will be sent on request.

### Standard Oil Company

(Indiana)

72 West Adams Street,

Chicago, U.S.A.



#### PITUITRIN IN TWO STRENGTHS.

The pituitary extract formerly known as "Pituitrin" and supplied in ampoules will hereafter be designated "Pituitrin O." A second preparation of the pituitary gland, bearing the title of "Pituitrin S," is now announced. Pituitrin S; approximately twice the "strength" of Pituitrin O Both, products are manufactured by Parke, Pavis & Co.

Pitnitrin Q (obstetrical) is intended primarily for use in delayed parturition due to uterine inertia. It has been called "an indispensable item in the armamentarium of the obstetrician."

Pituitrin S (surgical) is indicated specifically in the treatment of post-operative intestinal paresis, vesical atony, hemorrhage, shock, etc. It is of the utmost utility in the hands of the surgeon and internist.

Pituitrin O is supplied in ampoules of 1 mil (1 Cc.) and ½ mil (½ Cc.). Pituitrin S is supplied in ampoules of 1 mil (1 Cc.) only.

# PRACTITIONER \$2.00 PER YEAR

1414 S. Hope St., Los Angeles



## RADIUM SULPHUR SPRINGS NATURAL RADIO-ACTIVE MINERAL WATER It Sparkles and Foams Like Champaone

Hot Baths and Treatments cure Rheumatism, Sciatics, Neuritis, Paralysis, Locomotor Ataxia, Poor Circulation, Heart, Stomach, Liver, Kidney, Diabetes, Bright's, Blood and Nervous Diseases, Pemale Troubles. Doctor's advice free. Water delivered. Send for Booklet.

Melrose Ave. Cars Direct to Springs, Los Angeles

The Uniform Quality, Purity of Ingredients and High Standard of

# Horlick's the Original Malted Milk



Which have been maintained for over a third of a century, make it particularly desirable for infant feeding,

Owing to its high caloric value, nourishing and refreshing properties, and perfect digestibility, it has received the favorable consideration of the profession as a diet in the treatment of Typhoid, Diphtheria, Pneumonia and

Post operative cases.

**Always Specify** 

### "Horlick's"

and avoid substitutes

Horlick's Malted Milk Company, Racine, Wis.



ol. XXXII.

LOS ANGELES, MAY, 1917

No. 5

### Editor, DR. GEO. E. MALSBARY.

Associate Editors.

Dr. Cecil E. Reynolds, Dr. William A. Edwards, Dr. Andrew W. Morton, Dr. H. D'Arcy Power, Dr. B. J. O'Neill, Dr. Otto G. Wicherski, Dr. Charles H. Whitman, Dr. Edward, T. Dikon, Dr. C. G. Stivers, Dr. Brandman Reed, Dr. W. H. Durdey, Dr. J. W. Markews, Dr. A. J. Cook.

#### X-RAY PROGRESS.

Y GEORGE E. MALSBARY, M.D., RADIOLOGIST, X-RAY DEPARTMENT OF THE CALIFORNIA HOSPITAL, LOS ANGELES.

X-rays in the treatment of pulonary tuberculosis. The well known alue of X-ray therapy in tuberculosis f various parts of the body outside f the lung, has somewhat prepared us or the announcement that this form of eatment has been found of value in almonary tuberculosis. An optimistic eport is presented by Kupperle and achmeister,1 who succeeded in the eatment of rabbits inoculated with ibercle bacilli, using systematic exposres to the X-rays in larger doses and t shorter intervals than previously

employed. This method of treatment seems to have its chief effect upon the body cells rather than upon the tubercle bacilli, thus helping the individual to overcome the infection. The animal experiments were so promising that the treatment was extended to human beings. Hard filtered rays were used. Twenty cases of stationary pulmonary tuberculosis are reported, who received the treatment, and also a number of febrile and chronically progressive cases. The course was considered as complete in ten patients in this latter group, and all were reported as clinic-

Note.—This glimpse of X-ray progress must necessarily be brief and imperfect. Improvement in apparatus and technic has permitted better work both in diagnosis and treatment. Thus, in ophthalmology, for instance, the latest type of localizer has mechanical error of only one-tenth of a millimeter. The former model of the same take was efficient within a millimeter, so that it was not always possible to say thether a foreign body was just within the globe or just outside of it. With the ew model, the greater exactness adds materially to the certainty of diagnosis in nese important cases. In otology, stereoscopic radiography permits inspection of the mastoid cells as never before possible. In rhinology, the accessory sinuses may e seen as in a crystal. Laryngology is aided both through the exact location of forign bodies and the recognition of diverticulae and other obscure pathological conditions. Anatomy and physiology, as well as histology and pathology, chemistry and thysics, owe much of their recent development to the X-rays. Diagnosis is seldom omplete without an appeal to radiology. In gynecology, modern apparatus has deeloped X-rays so much more efficient in treatment that we can no longer be guided by experience gained through the use of the older and less efficient apparatus. The set of the Coolidge tube, with filtered hard rays corresponding to at least a nine-inch park-gap, applied by suitable crossfiring, has revolutionized treatment, and very ustifiably rendered untenable opinions and statistics based on old methods or now eing done by a less efficient technic.

ally cured. In every case improvement was manifest. The experimental and clinical data seem to indicate that the X-rays act chiefly on the relatively rapidly growing tuberculous granulation tissue.

During the several years that I was secretary and chief clinician of the Los Angeles Society for the Study and Prevention of Tuberculosis, I made frequent use of the X-ray for the relief of both neuralgic and pleuritic pains, and have continued to make such use of the ray in private practice. For some time I have been using the hard, filtered rays in the curative treatment of pulmonary tuberculosis, sometimes with and sometimes without administration of tuberculin. Though not ready to make more than a general preliminary, report of this work at this time, the results so far have exteeded my expectations. The Coolidge tube is the only one I have found satisfactory in this work. The technic may possibly be altered in the future, but at present I am using a nine inch spark-gap with the target ten inches from the skin. The chest is divided into twelve areas anteriorly and twelve posteriorly, and cross-firing is employed as in the treatment of uterine growths. The usual dosage per area per seance is five milliamperes for from three to five minutes, depending upon the susceptibility of the skin.

The value of the X-ray in the treatment of enlargement of the thymus gland is discussed by Grossman,<sup>2</sup> who states that röntgen irradiation has been employed with favorable results in a number of cases. Flügge, Waters, Rudberg, Ambertin and Bordet, Sinorzersky, Myers and Lange have demonstrated that thymic asthma and marked atrophy of the gland followed röntgenization, together with improvement of the symptoms. Involution begins in from one or two hours after exposure and continues for a variable length of

time according to the intensity of irradiation, regenerative changes gradually taking place after treatment has been discontinued.

Favorable results from the use of the X-ray in uterine hemorrhage are reported by Corscaden,3 who employed this form of treatment in twenty women, thirty-eight years of age and over, whether possessing fibroids or not. Complete amenorrhoea was effected in five per cent of the cases from the onset of treatment, in five per cent after one period, in five percent after three periods and in eighty-five per cent after two periods. The first period was occasionally found to be profuse. All of the cases were severe enough to partially or completely incapacitate the women. Untoward effects were observed in only two cases, one suffering from nausea and diarrhoea, the other from diarrhoea indistinguishable from mucous colitis. No late effects other than those accompanying the menopause were noted except in one case in which there was an attack of urenia six months after the end of treatment in a woman suffering from large polycystic kidneys.

The X-ray treatment of acne has now been used sufficiently long for the indications and contraindications to be fairly well established. Dosseker's4 experience, based on a large number of cases, indicates that repeated small doses of the rays, not strong enough to produce grossly appreciable reaction of the skin, or a single large dose with a reaction, seem to modify the epidermis, especially the sebaceous glands, to such an extent that the tendency to acne dies out. The efficacy of this form of treatment is especially marked in cases in which the acne is spread over a large surface with numerous pustules.

Discussing the X-ray treatment of skin diseases, McKee<sup>5</sup> deplores the tendency to separate dermatology from röntgenotherapy. To avoid errors in

diagnosis and the obvious consequences, it is suggested that one of three schemes be adhered to: for the dermatologist to employ the X-ray; for the röntgenologist to have at least a clinical knowledge of dermatology; or for both to combine their skill in behalf of the patient. In this paper the technic of treating skin diseases with the X-rays is briefly outlined, and a number of affections discussed that are amenable to this form of therapy. Among these are erythema induratum, granuloma annulare, lichen planus. psoriasis, eczema, lichenification and lichen circumscriptus, ponpholyx, calvus, callosetas and verrucae, keloid, nevus vasculosus, rhinoscleroma, tuberculosis cutis, lupus erythematosus and epithelioma including Paget's disease.

As a result of the success following roentgenotherapy in tuberculosis of glands, Kall6 has been subjecting venereal buboes to X-ray treatment. The results have been so good that he urgently advocates this method of treatment, especially in the early stages before much inflammation has developed. The treatment is more successful before suppuration; the pain subsides and the patient is able to go about without disturbances of any sort from this source. Even after suppuration has set in, the leucocytes are destroyed by the rays and are apparently absorbed. The fluctuation, pain and redness disappear and the infiltration gradually retrogresses, but the spot is left pigmented. Even indolent syphilitic buboes are said to respond readily to the X-ray. Developed abscesses must be evacuated with an incision, but the secretion ceases and the abscess heals quicker under subsequent exposure to the X-ray.

X-ray diagnosis in gas phlegmon. Payr. 1915, demonstrated that with the X-ray we may distinguish, from the position of the gas bubble, whether the gas phlegmon is deep or superficial.

Davis, s of Chicago, writes of his experience in a base hospital with the British army in France. Routine X-ray pictures are taken from two directions. From these one can note the presence or absence of a foreign body, its location, and, as a rule, can make out the condition of the tissue about the foreign body. Pus and gas also produce their shadows. From these pictures, Davis believes the surgeon has information that is of great help to him in the operative treatment.

X-ray in cancer of the lower lip. Boggs<sup>9</sup> declares that early surgical removal, wide and radical, has proved insufficient, because a recurrence takes place in over fifty per cent of cases when there is no glandular involvement, and in over seventy-five per cent when there is glandular involvement. In such cases, many prefer the X-ray to surgery. At any rate, I would urge the importance of the use of the X-ray both before and after such operations.

X-ray in exophthalmic goitre. Pfahler and Zulick<sup>10</sup> present a very good review of the literature, with an extensive bibliography, and urge that in all cases a trial of the X-ray should be given, which will enable us to avoid operation in many cases. Should treatment be prolonged over too great a period, hypothyroidism may be produced. They advocate less than the erythema dose. Generally speaking, with a Coolidge tube and transformer, a spark-gap of nine inches, the target eight inches from the skin, it will be found that five milliamperes of current given for five minutes and passed through three millimeters of aluminum and a layer of sole leather, will give the dose they generally use. Fischer<sup>11</sup> reports treating 94 cases of exophthalmic goitre with the X-ray, in which twenty per cent were unable to be out of bed except as they came for treatment. There was recorded complete subsidence of all objective and subjective signs and symptoms in fifteen of the cases, and positive benefit was obtained in from 72 to 80 per cent of all the cases. The exophthalmos was the most refractory symptom, yielding most slowly to treatment.

Case<sup>12</sup> very truly states that there is no literature on the subject of the X-ray treatment of hyperthyroidism which applies in the present day sense of X-ray therapy. In the modern X-ray treatment of thirty cases, he has found the results as good as can be obtained by surgery. He divides the skin of the neck into six to ten areas, covers the neck with lead so as to treat only one area at a time with filtered rays. similar to the cross-firing now in use in the treatment of deep-seated neoplasms. In this way the X-ray is multiplied from ten to thirty times, and if this is multiplied by the number of areas treated, we have about two hundred or more times of the X-ray applied to the goitre than could be applied before the advent of the Coolidge tube and without cross-firing, to which most of the available literature refers.

Ruggles<sup>13</sup> enthusiastically reports the use of the X-ray in twenty-four cases, of which ten pursued treatment for from three to eleven months and without exception showed improvement as regards nervousness, sweating, sleep-lessness and weight.

Seymour<sup>14</sup> reports e i g h t y c a s e s treated in the Massachusetts General Hospital, that have received at least two treatments and in which the average number of treatments received was four. All except seven cases showed improvement, and eight of the cases were absolutely cured of their symptoms. In the technic followed in those cases, the neck is divided into three regions, right, left and middle or suprasternal, and the treatment is directed to these areas. A Coolidge tube was used, the dosage being sufficient to

produce a slight erythema with the target ten inches from the skin, filtering through four millimeters of aluminum and a layer of sole leather. The dose was not repeated inside of three or four weeks.

X-rays in tuberculosis of glands. Boggs<sup>15</sup> states that when a chain of lymphatic glands is properly rayed the glands undergo fibrous degeneration. with almost entire obliteration without seriously influencing the surrounding tissue. If the glands are diseased, the reaction of the epithelial cells is much quicker and more marked. Since diseased cells are less resistant to the rays than the normal, the same amount of radiation which destroys the diseased cells may stimulate the surrounding healthy tissues. When chronic tuberculosis glands with periadenitis are treated, they may disappear entirely, or they may only become smaller and be reduced to fibrous nodules which do not entirely disappear. The result is that the glandular mass shrivels up, certain glands cease to be palpable, while others remain as small fibrous nodules, in most instances free from tuberculous foci. In some cases that he has treated these fibrous nodules were removed and examined and no active process found. He has a radiogram which shows how nicely a large tuberculous mass in the cervical glands disappeared, leaving a few deposits like the calcareous glands so often seen in the lungs after active tuberculosis. Boggs believes that surgery should be reserved in most instances for cases that have first been treated with the X-rays and for the removal of fistulous tracts caused by a suppurated gland, and then only after a few X-ray treatments have been given.

Of two things we may be fairly certain: first, that X-ray therapy will save from surgery many cases of tuberculosis of glands; and second, the cases of tuberculous glands operated

upon do better if exposed to the X-rays both before and after operation.

The value of the X-rays in intrathoracic disease in children.

Freeman<sup>16</sup> finds the X-ray of value in diagnosis, especially when combined with the clinical history and other signs. Often it may fix a diagnosis that otherwise might remain obscure. Radiographs of the chest in children are a material aid in diagnosis. They are probably of most value in making a diagnosis of miliary tuberculosis, and are often helpful in recognizing a pneumonia, especially in the absence of the usual physical signs, in making a differential diagnosis between empyoma and pneumonia. The X-ray examination is often of material assistance in the recognition of diaphragmatic hernia. In lesions of the heart, it often furnishes reliable information as to enlargement, modification in the shape of the heart, dilatation, or the presence of exudate, and will often enable us to differentiate plastic exudate from fluid.

In miliary tuberculosis, the X-ray is of especial value, for the physical signs of miliary tuberculosis in the lungs are those only of a slight bronchitis. We see repeatedly children with fever, sibilant and sonorous rales, sometimes subcrepitant, of the significance of which we can get no definite estimation without the X-rays. A positive von Pirquet test renders the diagnosis of tuberculosis more probable, but still leaves us with the possibility of a simple bronchitis in a child with a tuberculous lymph node somewhere in the body. Having, however, obtained a characteristic picture with the X-ray, we no longer need to speculate on the lesion present.

The diagnosis of pneumonia in children, although usually evident to an intelligent pediatrician, we have learned from the use of the X-rays is occasionally impossible. Cases of well-defined pneumonia may give rise to no physical signs, and even after the pneumonia has been localized by the X-rays, a subsequent physical examination will give negative results. Diagnosis of fluid in the chest may often be corroborated by the X-rays. The presence of air in the chest is also well shown in the X-ray examination; if there is a combination of air and pus, there is a pus level that is very characteristic.

The question often arises whether a murmur over the heart is a so called hemic or anemic murmur, or a murmur due to a damaged valve in the heart. Many children are prevented from taking the exercise they should have for their physical development and health by the presence of a cardiac murmur without other evidences of cardiac disease. In such cases an X-ray of the heart gives one an excellent basis for an opinion as to the origin of the murmur. In diseases of the heart in children, the X-rays give us a most valuable indication of the amount of damage to the heart by the size and shape of the heart shadow, and successive pictures provide us with one of our best means for the control of exercise in these cases. For such control, the temperature and pulse rate are of great value, but the X-ray picture will occasionally change our method of treatment to the advantage of the patient.

Another condition shown well by the X-rays, of which we get little evidence otherwise, is enlargement of the thymus gland, which gives a broad shadow above the heart. Enlargement of the bronchial and mediastinal lymph glands may also be brought out by the X-rays. The X-rays furnish a most important means of reaching a definite diagnosis of intrathoracic lesions, and should not be neglected in any obscure case. It is peculiarly adapted to children, as one can usually get a better picture of a child than of an adult, and

because children, even when sick, can easily be carried to an X-ray laboratory.

In sinus disease, the value of the X-rays in diagnosis and also as a guide to both intranasal and external operating, is firmly established, but improvements in technic are still being made. G. E. Pfahler<sup>17</sup> describes a position which he has found useful in obtaining good negatives without distortion.

X-ray films are cut to the size 2x31/4 inches, with two corners rounded, enclosed in black envelopes and waxed paper. The firm is placed in the mouth, reaching to the posterior wall of the pharynx, which may be cocainized if necessary, though it is usually not. The bite of the patient's teeth holds the film steadily in position. The patient is placed in the sitting posture, with the chin supported, and the rays are projected toward the film from a point in the median line about midway between the glabella and the occiput, the exact position varying with differences in the shape of the skull. The exposure used is 150 milliampere seconds with a seven inch spark-gap. The sphenoid sinuses are shown with great accuracy and detail, surrounded by the teeth of the upper Pfahler's position has been criticised 18 as impractical because the film is likely to be moved by the tongue and soft palate during exposure. Its advantages are that the film lies close to the sphenoid, and the tissues to be penetrated are very few. The sinus is shown undistorted and with no overlying shadows of the etymoid cells. I prefer a stereoscopic view, taken with the head bent well forward towards the plate.

1. Deutsche med. Wochenschrift, Jan-

uary 27, 1916.
2. New York Medical Journal, November 27, 1915. American Journal of Obstetrics and Diseases of Women and Children, Janu-

ary, 1916.
4. Therapeutische Monatshefte, August, 1915.

5. Journal of the American Medical Association, 1915, p. 1886.
6. Münschen med. Wochenschrift, October 19, 1915.

7. Surgery, Gynecology and Obstetrics, 1916, p. 81.
8. Surgery, Gynecology and Obstetrics, 1916, p. 635.
9. Interstate Medical Journal, 1916, p.

117. 10. Pennsylvania Medical Journal, 1916,

p. 661. 11. Ugeskrift for Laeger, 1916. (Abstract in the Journal of the A.M.A., 1916, lxvii, p. 1706.)

12. Iowa State Medical Journal, 1916, p. 201.

California Journal of Medicine, 1916, p. 289. 14. Boston Medical and Surgical Jour-14.

nal, 1916, p. 568. 15. New York Medical Journal, 1916, 15. Neviii, 1016.

16. Archives of Pediatrics, December, 1916.

Laryngoscope, July, 1916. Transactions of the Section on gology, Otology and Rhinology, 18. Laryngology, A.M.A., 1916.

#### HOW THE STATE PROVIDES FOR ITS MENTALLY ILL.\*

BY DR. L. VERNON BRIGGS, SECRETARY MASSACHUSETTS STATE BOARD OF INSANITY.

The earliest mention of the care of the mentally ill in this State which I have seen is a quotation from the will of Thomas Hancock, who died in 1764. This, and quotations from Charles Dickens, who visited America in 1842, are made use of in a most interesting paper on the "State Care of Boston's Insane" by Dr. Henry P. Frost, the present able superintendent of the Bos-

ton State Hospital. Thomas Hancock, in his will (which is dated March 5, 1763) says:

"I give unto the Town of Boston the sum of six hundred pounds lawful towards erecting and finishing a convenient House for the reception and more comfortable keeping of such unhappy persons as it shall please God, in His providence, to deprive of their reason in any part of this Province;

<sup>\*</sup>Read before the Evans Memorial Meeting of the Mass. Homeo. Hospital.

such as are inhabitants of Boston always to have the preference. This sum I order shall be paid into the hands of the Town Treasurer for the time being, viz: One-half thereof in three months after said House shall be begun, and the other half thereof when the same shall be finished and fit for said purpose. And in case said House shall not be built and finished in three years after my decease, I then declare this legacy to be void; or if I should in my lifetime erect it, this bequest then to be void."

Thomas Hancock was an uncle of John Hancock, afterwards the first Governor of Massachusetts. It was Thomas Hancock who built the house which was inherited by his nephew, Governor John Hancock, which became the Governor's Mansion, next to the State House on Beacon Hill.

The above legacy, given to the City of Boston by Mr. Hancock, was declined because the Selectmen did not consider that there were enough mentally ill persons in the Province for whom to erect such a house, and it was not for 75 years, or in 1839, that there was opened, for the reception of patients, the Boston Lunatic Hospital, built because of the over-crowded condition of the Worcester Lunatic Asylum (now the Worcester State Hospital), which was opened in 1833.

Prior to that time. McLean Hospital. (then in Somerville) received patients. This hospital was opened for the reception of patients in 1818. Taunton Hospital was opened for the reception of patients in 1854; Northampton State Hospital in 1858; Worcester State Asylum (now the Grafton State Hospital) in 1877; Danvers State Hospital in 1878; Westborough State Hospital in 1886; Foxborough State Hospital in 1893; Medfield State Hospital in 1896; Monson State Hospital in 1898, and the Gardner State Colony in 1902. Mental Wards at the State Infirmary were opened in 1866, and the Bridgewater State Hospital (for the criminal insane) was opened in 1886. The first for the feeble-minded school was

opened at Waltham in 1848, and a second school at Wrentham in 1907.

According to a census taken in 1865, there were approximately 2104 so-called insane and feeble-minded in a total population of 1,267,031, or 1 to 602. Today, with an estimated population of 3,693,310, we have 18,604 so-called insane, feeble-minded, epileptics and alcoholics in institutions under the care of the State Board of Insanity, or 1 to 198.

The mentally ill in this and most of the other States of the Union are to-day under State supervision. In Massachusetts the average annual expenditure for their care and treatment, for a five-year period, including both maintenance and expenditures for special purposes, is \$4,068,455, the largest single item in the State's budget.

It therefore behooves every citizen, for reasons of economy as well as humanity, to know how this important branch of the State's work is being carried on. We have in Massachusetts 10 State Hospitals for the mentally ill, 2 schools for the feeble-minded and a school for the epileptics; also 27 private hospitals or sanitariums.

Each of the State Hospitals is designed to cover a certain district, so that it shall not be necessary to send the mentally afflicted patients where they cannot be visited frequently by their families and friends, when the State properly provides for all its wards.

These institutions are under the control of a central Board of Insanity, of which the present speaker has the honor to be the Secretary. For many years this Board consisted of five unpaid members, whose powers were merely recommendatory or advisory. They met monthly, the actual work being done by a paid Executive Secretary. In 1914, the Board was reorganized by act of Legislature, and on the recommendation of the Commission on Economy and Efficiency, after exhaus-

tive investigation, including the investigation of a scandal at the Worcester State Hospital, in which it was proven that there was really no central authority in the State upon whom to fix responsibility.

The new Board, as at present organized, consists of three paid members, giving full time, one of whom must be a specialist in mental diseases. The Board now has mandatory powers and greatly increased responsibility, and consequently its opportunities for usefulness have been greatly increased. Without undue vaingloriousness, we feel that we may justly be proud of our recent progress in several directions, accomplished in a little over a year and a half.

Among the things which this Board has accomplished during its short term of office, which I will mention briefly, are:

The issuing of Bulletins monthly, informing the different State Hospitals and the public what is being done in the hospitals and by this Board.

Raising the standards of requirements for physicians on the staffs of

the State Hospitals.

The establishment of out-patient departments for the mentally ill from all hospitals excepting Danvers where there were out-patients.

Stimulating the discharge of patients who could be taken care of as well

outside the institutions as in.

Re-classifying the patients in the institutions, segregating the inebriates, the epileptics, the feeole-minded and the delinquents into groups by themselves.

Investigating the mental condition of prisoners at the Bridgewater State Hospital and at the State Prison, to ascertain which of the prisoners are really responsible for the crimes which they have committed, and which are not.

Classifying the medical officers of the State institutions according to salaries paid, thus making the positions in the different hospitals uniform.

Encouraging the opening up of the hospitals to the friends and relatives

of patients, and to visitors.

Purchasing the land for a new Metropolitan State Hospital, and also for a new school for the feeble-minded in the western part of the State, and making plans for the new Metropolitan State Hospital.

Formulating rules and regulations for

the government of the hospitals.

Making plans for a uniform curriculum, and raising the standard of the training schools for nurses in all the hospitals.

Controlling the use and abuse of drugs and alcohol in the State institu-

tions.

Increasing the scientific work, which also has reduced the number of accidents and injuries, and done much toward ascertaining the cause of mental disease.

Establishing fire drills in all the hospitals, and requiring monthly reports of the same.

Changing asylums into State Hospitals.

Formulating many other progressive measures, which there has not yet been time to work out or establish.

Today there is an over-crowding in our State Hospitals of 807, and no relief is in sight for the next two years. The Legislature of Massachusetts has not appropriated any money for additional beds in the past two years. There is a bill before the Legislature now asking an appropriation of a million dollars for the erection of the new Metropolitan State Hospital, to be built on land which this Board purchased last year. There are committed patients today belonging in the Metropolitan District to the number of 6000. Of this large number, only 1609, or 26 per cent., are taken care of in the Metropolitan District. The others belonging in this district are sent to different hospitals, where in many instances their families cannot visit This also leads to an overcrowding in these hospitals, most of which would otherwise be able to take care of the mentally ill of their own districts without additional buildings.

It is planned that the Boston State Hospital shall accommodate 2000 patients. There are plans for 2000 more at the Metropolitan State Hospital, and the architects' plans for buildings for the same are now before the Legislature. It is hoped that the Legislature will appropriate the money to commence work on this new institution this year.

Coming down to just how Massachusetts takes care of its mentally ill: There are three ways in which patients may be admitted to our State Hospitals.

- (1) Those people in the community who feel that they need hospital care because they are conscious of some mental disturbance, and who are perfectly capable of deciding where they will go, may go voluntarily to the hospitals, and are classed as "Voluntary" patients. Four years ago we had 359 voluntary admissions in our State Hospitals; during the past year we have had 963. These patients come to us usually in the very early stages of their trouble and receive treatment which, in a majority of cases, enables them to leave the hospital without commitment and without actually losing their rea-This increase shows the greater confidence the public has had in our institutions the past few years.
- The next class of cases are (2)"Temporary Care'' termed cases, which, under Chapter 307, of the Acts of 1910, and Chapter 174 of the Acts of 1915, may be sent to any of the State Hospitals for an observation period to determine if there is some obscure mental disturbance due to disease, accident or injury, drugs or alcohol, or a psychic disturbance. In the Boston district these cases go to the Psychopathic Hospital, which has special facilities for temporary care and acute cases. Last year, 1529 such cases were received at the Psychopathic Hospital. These patients may be sent by any physician, preferably the family physician, or by the police, without The class of patients commitment. who are usually received from the police are those who are found on the street, in hotels or in boarding-houses,

who suddenly become confused, apprehensive or, in some cases, violent, and who, prior to the enactment of this law, were taken by the police to the station house, where, if the officers felt there was some mental trouble or delirium, an order was made for their removal to the Tombs. Here they were locked up, sometimes in cells without even a mattress, and examined by two physicians who the next day appeared before the Judge (if the Court happened to be sitting). Otherwise the patient might have to remain in the cell in the Tombs over Saturday and Sunday (and a holiday occasionally) before receiving expert medical care. It was a crime to take these people and shut them up in cells. It is now against the law, and the police, who have always felt opposed to these brutal methods, now take these persons directly to the Psychopathic Hospital, where they are received, bathed and put to bed, nursed and given proper medical care and treatment, as are cases in general hospitals. This new law applies all over the State, and these 10-day Temporary Care cases may be taken into any State Hospital under the same conditions.

(3) The third class of admissions are those whose family physician, or other physician who may be called, finds that the patient is so disturbed mentally that there is no question but that he should be committed to a hospital, for a time at least. These cases have each to be examined by two physicians, who appear promptly before the judge of the court, and the latter gives an order to some court officer to take the patient to the hospital to which he has legally committed him.

The State Board of Insanity now has a bill in the Legislature asking that a law be passed which will result in the State Hospitals sending trained nurses and attendants for these patients, instead of having them taken to the hospitals by the police or court officers. This is no reflection on the manner in which most of these patients are handled by the police, but the principle is wrong, that a person having mental disease should be handled by officers of the law, while, if he is suffering from any other disease, ambulances and nurses are sent for him and he is treated as an ill person and not as a criminal. New York has such a law, as well as Rhode Island and North Carolina, and it is hoped that Massachusetts will soon be ready to handle her mentally ill people as she does all other cases of illness.

Nine of our State Hospitals have training schools for nurses. It has been difficult to get enough nurses of the right sort to take the training, and many of our institutions have to depend largely upon trained or untrained attendants, both men and women. With the introduction and standardizing of a new curriculum for nurses, it is hoped that the qualifications demanded will be so high that this training course will attract a class of women of ability, who shall become experts in their work. We hope soon to have in each State Hospital a three-year course, including nine months in a general hospital, and also including instruction in therapeutic occupation, hydrotherapy, etc., as well as much special instruction in the care and treatment of the insane. In addition, it is proposed to have a postgraduate course at the Psychopathic Hospital, which we trust will be largely attended by nurses from our own and other high-grade training schools who desire to fit themselves for supervisory and teaching positions in the various State Hospitals.

The present Board is also encouraging the employment of female nurses in place of male attendants on all of the wards of the State Hospitals, both male and female. Where this has been done, improvement has followed, both in the condition of patients and the condition of the wards. Several of our

State hospitals have started this work and many hospitals in this country now have only women nurses in charge of the male wards. Even in Oklahoma. according to the last report of the Oklahoma State Hospital at Norman, "women nurses have been employed in male wards in this hospital for the last four years. In not a single instance in these years has a male patient struck his nurse. Men rarely are so disturbed that they will not yield to the gentleness of women. The presence and ministration of women nurses in male wards have been observed as possessing even clinical merit, as several classes of psychoses seem to respond more quickly to nursing by women than by men."

The out-patient service of the State Hospitals has been stimulated by this Board, so that now the State Hospitals have reached out into the community to give relief to the early case and prevent the progress of mental disease and to obviate the necessity of hospital residence. This out-patient service has grown month by month, and now outpatient clinics are established in the following cities: Worcester, Spencer, Taunton, Fall River, New Bedford, Northampton, Springfield, Greenfield, Pittsfield, Boston, Danvers, Lawrence, Gloucester, Haverhill, Lynn, Salem, Newburyport, Malden, Westboro, Gardner, Fitchburg, Winchendon, Monson, Brockton, Grafton. The Massachusetts School for the Feeble-Minded has also reached out into the community and has clinics in conjunction with these State Hospital clinics at Worcester, New Bedford, Fall River, Taunton, Haverhill and Springfield.

The last three months' report shows that 82 patients came or were sent to these clinics by physicians, 11.15 per cent. of whom were never in a State Hospital and are therefore the early cases in which preventive measures are so valuable.

(Continued next month.)



A MEDICAL, CLIMATOLOGICAL AND SOCIOLOGICAL MONTHLY MAGAZINE.

This journal endeavors to mirror the progress of the profession of California and Arizona.

Established in 1886 by Walter Lindley, M.D., LL.D. DR. GEORGE E. MALSBARY, Editor and Publisher.

Associate Editors,

Dr. Walter Lindley, Dr. W. W. Watkins, Dr. Ross Moore, Dr. George L. Cole, Dr. Cecil E. Reynolds, Dr. William A. Edwards, Dr. Andrew W. Morton, Dr. H. D'Arcy Power, Dr. B. J. O'Neill, Dr. Otto G. Wicherski, Dr. Charles H. Whitman, Dr. Edward T. Dillon, Dr. C. G. Stivers, Dr. Boardman Reed, Dr. W. H. Dudley, Dr. J. M. Mathews, Dr. A. J. Cook.

Address all communications and manuscripts to
EDITOR SOUTHERN CALIFORNIA PRACTITIONER,
Subscription Price, per annum, \$2.00. '1414 South Hope Street, Los Angeles, Cal.

#### **EDITORIAL**

#### X-RAY PROGRESS.

The development of radiology as a specialty has proven a great advantage to specialists along other lines and especially to that arch-specialist, the general practitioner. With the rapid development of this new specialty and the manifold improvements in apparatus and technic, new and greater uses are being found for the rays in diagnosis and treatment. Indeed, the evolu-

tion of radiology has been so rapid that already much of the earlier clinical experience does not apply to the work now being done, both more safely and more effectually, with the latest improved apparatus and technic. We have come to realize that the X-rays vary in quantity and quality much as light, and the improvements in technic here have been fully as great as in the photographic art.

#### EDITORIAL NOTES

Dr. P. F. Haskell has opened offices in Norwalk.

Dr. James Benners has located in Highland, near Redlands.

Dr. C. G. Stivers has opened offices at Suite 406, Auditorium Bldg.

Dr. T. E. Cunnane has been elected County Physician of Ventura County.

Dr. Frank D. Bishop now has offices both in Lancaster and Palmdale, Antelope Valley.

The State Legislature has adjourned in Sacramento without having done any serious harm.

Dr. L. E. Lepper, of Pomona, has gone to Rochester, Minn., to spend three years with the Mayos.

Dr. R. S. Lanterman, of Los Angeles, has been again arrested for performing an alleged illegal operation.

Dr. E. Avery Newton is chairman of a committee that is mobilizing the Medical profession of Los Angeles County.

Dr. Philip Wallace and Mrs. Clara Grace Culp of Gilroy, were married in Del Monte on the evening of April 29, 1917.

Dr. Chas. A. Bell, formerly of Shasta County, has located in Santa Barbara.

Dr. Henry Harrower has opened offices in Glendale.

Dr. John P. Gilmer has asked the authorities of the City of Los Angeles to enact a law making an attempted suicide a misdemeanor.

The Pacific Medical Journal for April devotes fifty pages to an interesting and valuable resume of all recent California cases of malpractice.

England and France are in immediate need of 2000 medical officers and 5000 ambulance attendants, it is announced by Dr. Franklin Martin of Chicago. Dr. W. J. Callnon, of San Bernardino, has been commissioned First Lieutenant in the Federal Medical Service Reserve Corp and is now located at Fort McDowell.

There was a good attendance at the session of the Southern California Medical Society at Redlands, and all reported that the papers read and the discussions were able and interesting.

Dr. Homer Rogers of Bakersfield, Captain of the Medical Corps, Second Infantry of the National Guards of California, has been ordered to Sacramento for duty.

Dr. Arthur R. Reynolds, formerly of Chicago, recently delivered an address in Pasadena on the Achievements of Medicine. The address was delivered under the auspices of the Pasadena Medical Society.

Major C. W. Decker has been appointed acting Chief Colonel of the National Guards of California. Dr. Decker's record as surgeon in charge of the Base Hospital on the Mexican Frontier was an enviable one.

Dr. Ida B. Parker, age 47, who graduated from the medical department of the University of Southern California in the class of '95, died at her home in Orange on April 15, 1917. She was an able physician, and in all respects a worthy woman.

Dr. John W. Pollard, age 56, who had been a practicing physician in Los Angeles for fifteen years, died suddenly in his office of heart disease, on April 14, 1917. Dr. Pollard was a graduate of the Cincinnati College of Medicine and Surgery, class of '89.

Dr. W. L. Denton of the Yellow Aster Mine Hospital at Randsburg, was called hurriedly to attend a saloon keeper on the 1st day of April. When he arrived the saloon keeper jumped out of bed and said, "April Fool." Dr. Denton is now suing the mixologist for a \$50 fee.

The State Medical Board of California has permitted all medical students attending California medical colleges to enlist in any branch of the service, take a special examination and on passing this, to complete the school year practically two months ahead of time.

Our deepest sympathy goes to Dr. (has. H. Whitman, Medical Director of the County Hospital, who has been for some weeks seriously ill. It is reported that this illness is of such a persistent nature, that the doctor has under consideration his retirement from the position he has so ably filled.

The Journal of the A. M. A. for April fourteenth has a table showing that the medical departments of the University of Southern California, the Leland Stanford Jr. University and the University of California each had three graduates examined during 1916, in states other than California, all of whom passed. The first of these institutions had twenty-three examined by the California State Board of Medical Examiners, the second had twenty examined by this board and the third had thirty examined by our California board and we are glad to sav all of these passed making a clean record both at home and abroad for our three leading medical schools.

Dr. Rea Smith, Director, and Dr. Guy Cochran, alternate Director, have recruited a complete staff of physicians and nurses for a Naval Base Hospital to be located either in San Diego or Los Angeles. The following surgeons compose their staff.: Dr. Rea Smith, Dr. Guy Cochran, Dr. Harry W. Vorhees, Dr. Phil Boller, Dr. Thomas R.

McNab, Dr. Louis Josephs, Dr. W. W. Richardson, Dr. Lewis B. Morton, Dr. Frank W. Miller, Dr. D. P. Fredericks. The medical staff of doctors is composed of Dr. Dudley Fulton, Dr. D. J. Frick, Dr. J. Rae Cowan, Dr. Bertrand Smith, Dr. A. T. Charlton, Dr. Egerton Crispin, Dr. A. S. Granger, Dr. George Pruess; Dr. W. E. Sibley and Dr. J. F. Cook.

We have received the following reprints:

Prostatectomy. By W. B. Dakin, M.D. Los Angeles.

Some Observations Concerning Post-Operative Complications of the Lane Short Circuit and Colectomy. By Rea Smith, M. D., Los Angeles, Cal.

A Report of Fifty Cases of Tuberculosis of the Kidney and the Bladder Clinically Cured Without Operation. By F. S. Dillingham, M. D., Los Angeles, Cal.

The Eye, Ear, Nose and Throat Symptoms Manifested in Brain Tumor. By Hugo A. Keifer, M. D., Los Angeles, Cal.

An Arthroplasty of the Elbow. By Rexwald Brown, M. D., Santa Barbara, Cal.

Any physician interested in the subjects of either of these reprints can get a copy by writing to the author.

# SYPHILIS AS AN ETIOLOGICAL FACTOR IN LAENNEC'S ATROPHIC CIRRHOSIS OF THE LIVER.

By Douglas Symmers.

Symmers in a study of Atrophic Cirrhosis of the Liver in the International Clinics concludes that alcohol plays a secondary role in the Etiology of Atrophic Cirrhosis of the Liver. A certain percentage of the cases conform to the type described by Laennec. In this group syphilis is the primary etiological factor and alcohol, if it enters into the process at all, is contributory, and not essential.

#### BOOK REVIEWS

ANATOMICAL NAMES, Especially the Basle Nomina Anatomica ("BNA"). By Albert Chauncey Eycleshymer, B.S., Ph.D., M.D. Assisted by Daniel Martin Schoemaker, B.S., M.D. With Biographical Sketches by Roy Lee Moodie, A.B., Ph.D. Octavo 764 pages, illustrated by numerous wood engravings and by two full-page plates in red and black. Extra muslin \$4.50 net.

This volume is designed to fill a want that has existed up to the present time. There has been no work which gave a complete and correct list of BNA terms. Fully one-half of this book is an Index, whereby all Anatomical terms of every sort may readily be referred to their correct equivalents in the BNA nomenclature. A full Biographical list is incorporated in the book, the most complete that has yet been published, and the only one in the English language. The book has aimed at completeness and thoroughness and should be a standard for many years to come. No medical library worthy the name will be without it. A copy should be in every hospital.

EMERGENCY SURGERY. By John W. Sluss, A.M., M.D., F.A.C.S., Associate Professor of Surgery, Indiana University School of Medicine; Ex-Superintendent Indianapolis City Hospital; Surgeon to the City Hospital; Fourth edition, revised and enlarged, with 685 illustrations, some of which are printed in colors. Philadelphia: P. Blakiston's Son & Co., 1012 Walnut Street. Price \$4.00 net.

A very attractive volume, well bound in flexible leather. You will note that this is the fourth edition. In addition to a correction of minor details, the text pertaining to the surgery of war has again been carefully revised and brought up to the moment. The treatment of wound infections has been rewritten, incorporating the latest experience and practice, much of which emanates from the European battlefields. Should our own doctors be called into the field, they will find herein much assistance in the beginning of their work.

FOOD AND THE PRINCIPLES OF DIETETICS. By Robert Hutchison, M.D., Edin., F.R.C.P., Physician to the London Hospital; Physician with charge of Out-patients to the Hospital for Sick Children, Great Ormond Street. With plates and diagrams. Fourth edition. New York: William Wood & Co., 1917. \$4.00 net.

In addition to revision and minor alterations, this edition presents a sec-These substances, tion on Vitamins. though of doubtful chemical nature, are of great vital importance. It is now known that scurvy is dependent upon the absence of a vitamin, though a different one from that concerned in the production of beri-beri. Furthermore, it seems that normal growth requires the presence in the food of substances of a similar nature. relatively large increase of weight sometimes observed upon adding to the food small quantities of meat extract, is probably to be explained in a similar way. This edition furnishes us with a refreshingly up-to-date monograph on food and the principles of dietetics.

DISEASES OF INFANCY AND CHILD-HOOD, their dietetic, hygienic and medical treatment. By Louis Fischer, M.D., New York. Seventh edition; 305 illustrations, and 43 full page plates. Philadelphia: F. A. Davis Company, Publishers, 1917. \$6.50 net.

Since the last edition appeared, research in pediatrics has enriched our knowledge regarding the cause of the deficiency diseases, such as scurvy and rickets. It has been experimentally proven that these diseases are caused by a lack of vitamines in the food. In the chapters on nutrition, therefore, we are glad to note that an article on Vitamines has been added. The value of blood transfusion as a therapeutic measure is described and illustrated by clinical cases. D'Espine's sign is described, which is an important aid in the detection of tuberculosis in its earliest stage, before the lung tissue is destroyed. Tuberculides, a skin manifestation of tuberculosis in many young children, is illustrated; so also is the Schick reaction, which is of great value in showing the susceptibility to diphtheria. In brief, this is an up-to-date edition of Fischer's well known work.

#### **MISCELLANEOUS**

#### MEDICO-MILITARY MATERIEL\*

Peter, an English gardner, depicted in "The Worn Doorstep," refused to believe that his country was at war until, during a sojourn at a neighboring little seaport, he found the remains of various women and children scattered over the landscape, as a result of a visit from the enemy's ships. His wife remarked, "Some minds need shot and shell to open 'em." So possibly it may be with us under like conditions.

But no matter what the future has in store, surely the intelligent part of the community cannot ignore the lessons of our recent war with Spain, all of which most of us saw and part of which many of us were.

Need we recall that at the beginning of 1898 the mobile United States Army numbered 20,000 officers and men. equal to any anywhere. This single tactical division was perfectly equipped in all departments, including the sanitary department, for current and prospective demands; but beyond this there was not even a tentpin, nor was there possibility of getting more for many months. Military matériel is largely special, is not obtainable in the market, and must be made to order after patterns requiring special machinery.

Then came war and the successive calls for 250,000 volunteers. The men were gathered quickly, but the materiel not for months and some of it not at all.

The result was inevitable; the 250,000 willing citizens who volunteered in defense of their country, had little

in defense of their country, had little

\*Editorial, The Military Surgeon,
March, 1917.

or nothing of the material essentials requisite to their well-being or efficiency as soldiers. What wonder that a considerable percentage of them died from unnecessary causes, due to neglect. Neglect by whom? Their own countrymen, unequivocally and unquestionably. Year after year and year after year had the War Department vainly urged the necessity for accumulating a reserve stock for just such a contingency, but Congress always turned a deaf ear and the people acquiesced.

Again the war clouds are rolling over us; Congress has authorized, and the War Department is as rapidly as possible increasing the strength of the permanent force to approximately 200,000. For this number, double what we have heretofore had, the matériel now on hand is adequate, but not enough for any more.

That we have this much, and we are now writing of the Sanitary Department, is only through insistence of its officers and the backing of the medical profession; notwithstanding the Dodge Commission recommended that there be always available "a year's supply for an army of at least four times the actual strength, of all such medicines, hospital furniture and stores as are not materially damaged by keeping, to be kept constantly on hand in the medical supply depots."

The General Staff has announced that, besides the 200,000 above mentioned, in event of war we would require the organized militia, 250,000, and in addition, 500,000 volunteers.

To meet the medical requirements of the 750,000 there is now practically

nothing, and, were the money available it would take nearly a year to obtain the matériel, which would cost about \$10 per man.

So it is, we are relatively exactly where we were nineteen years ago, with just enough for the Regular Army and nothing more.

It is only fair to assume that the Surgeon General has presented these facts to the proper authorities. But to ask is one thing, and to get is another.

Again we are in a situation identical to that in 1898 and again we are facing the same results that followed that situation.

If, in the event of war, the people wish their husbands, sons and brothers to die as they then did, from preventable causes, the Surgeon General of the Army is powerless to deny them. But The Military Surgeon trusts that when the time of sacrifice comes, they themselves will assume the responsibility and not place it upon the shoulders of an officer who devotedly has sought, by every proper means, to prevent a repetition of the insanitary experiences of the Spanish-American War.

Explanation of 1917 Assembly Bill 1375 (Gebhart) Amendments to the Medical Practice Act. Effective On and After July 27, 1917.

No. 1. In Sec. 2, the annual meeting is changed from the second Tuesday of January to the third Monday in October. The place of meeting, Sacramento, is not changed.

No. 2. In Sec. 2, the language is changed so that the Board may publish and sell a directory, etc. Heretofore it seemed to be mandatory upon the Board. Also provides for an annual \$2.00 tax for all licentiates and a penalty of \$10.00 is imposed for non-payment of the same within 60 days following January 1st of each year.

Revocation is automatically imposed for non-payment after 60 days.

No. 3. Sec. 8 is amended to include the issuance of cert? ficate to practice midwifery.

No. 4. Sec. 9 is amended to include the qualification of applicants for the future in the practice of midwifery.

No. 5. Sec. 10 is amended to include the subjects and minimum requirements of study for a certificate to practice midwifery.

No. 6. Sec. 11 is amended to list the subjects of examination for applicants to practice midwifery.

No. 7. The same section is amended to allow the use of an interpreter selected by the Board in an examination, the fee for same to be paid by the applicant.

No. 8. Sec. 12 is amended to give the officers of the United States Health Service the right of registration the same as the regular United States Army or Navy medical officer. This is done at the request of Surgeon General Rupert Blue of the United States Health Service.

No. 9. Sec.  $12\frac{1}{2}$  is amended to take care of the midwives already in practice in the State of California. It provides for a test of competency, proof of good moral character, etc., and a fee of \$20.00.

This section also provides for an oral practical or clinical examination for those holders of a certificate "to practice Osteopathy" issued under the laws of this State, who desire to qualify for a Physicians' and Surgeons' Certificate.

No. 10. Sec. 13 is amended to raise the fee for reciprocity applicants from \$50.00 to \$100.00. The reciprocity feature of the act necessitates the employment of investigators, clerks, etc., and it is necessary therefore to raise the fee.

No. 11. Section 14 of the act is amended to provide for the revocation of certificates to practice midwifery.



# During Pregnancy

STANOLIND Liquid Paraffin is an admirable laxative for use during pregnancy. It produces no irritation of the bowel, has not the slightest disturbing influence upon the uterus, and no effect upon the fetus.

The regular use of Stanolind Liquid Paraffin in the later months of pregnancy is an effective means of avoiding some of the serious dangers attending the parturient state because of sluggish bowel action.

Stanolind Liquid Paraffin counteracts to a definite extent an unfortunate dietetic effect on the intestine in this manner; the concentrated diet of our modern civilized life containes so little indigestible material that the residue is apt to form a pasty mass which tends to adhere to the intestinal wall. Stanolind Liquid Paraffin modifies this food residue, and thus tends to render the mass less adhesive.

Stanolind Liquid Paraffin is mechanical in action, lubricating in effect. Its *suavity* is one of the reasons why increase of dose is never needful after the proper amount is once ascertained.

A trial quantity with informative booklet will be sent on request.

#### Standard Oil Company

(Indiana)

72 West Adams Street

Chicago, U.S.A.

73b

No. 12. Section 15 of the act is amended to strike out the word "other" which heretofore has resulted in placing an ambiguous construction upon the terms of the section.

No. 13. Sec. 17 has been amended to include both physician or surgeon or practitioner, that is, the use of any term indicating that one is licensed to practice. In the same section the penalty clause is stricken out.

No. 14. The penalty clause has been stricken out of Sec. 18.

No. 15. A new section has been created designating the act as the State Medical Practice Act, and providing a penalty for the violation of the provisions of any portion thereof.

### CHRONIC CONSTIPATION OF

In the treatment of this condition, what the physician may expect IN-TEROL to do is the following:

(1) It keeps the feces from becoming dried and hard. That is, it keeps them soft and plastic; (2) and in addition, by lubricating them, it (3) enables them to squeeze or slip through angulations, convolutions and constrictions of a crowded gut; (4) at the same time, there is a protective action to any raw or abraded spots.

By doing these things, INTEROL relieves fecal pressure and gaseous distention, so that the autotoxic as well as nervous symptoms are likely to be reached.

All these it does effectively and harmlessly. Its use does not prevent the adjunctory use of any orthopaedic, surgical or other procedure that may be indicated. On the contrary, INTEROL itself is more an adjunct to such other measures.

INTEROL is unquestionably all that it is claimed to be—a valuable "dietetic accessory." There is no other accessory measure that will better accomplish what INTEROL does accom-

plish in cases where it can accomplish it.

DOSAGE is usually a tablespoonful morning and night on an empty stomach, although this varies with the individual pecularities.\*

\*Booklet and samples to physicians. Van Horn & Sawtell, 15-17 E. 40th St., New York.

In Pruritus—even in severe forms of genital, anal, diabetic, eczematous itching, K-Y Lubricating Jelly in a great majority of cases, will bring redief, or at least grateful alleviation.

To anoint the skin in these conditions, K-Y Lubricating Jelly is not only effective, but convenient and economical since it can be used without staining to soiling the bed clothes or the patient's linen. If the part is washed before each application, the best results are obtained.

Home Phone 31156.

Sunset East 333.

#### "THE ROSENA REST RETREAT"

A private home, with experienced nurses, for the care and cure of nervous and mental patients. A delightful, permanent home for chronic cases.

Address:

#### THE ROSENA REST RETREAT.

2814 Downey Ave. (now N. Broadway), Los Angeles, Cal.

Dr. H. G. Brainerd, Exchange Bldg., Third and Hill, Los Angeles, or any of the Leading Hospitals.



## RADIUM SULPHUR SPRINGS NATURAL RADIO-ACTIVE MINERAL WATER It Sparkles and Foams Like Champagne

Hot Baths and Treatments cure Rheumatism, Sciatica, Neuritis, Paralysis, Locomotor Ataxia, Poor Circulation, Heart, Stomach, Liver, Kidney, Diabetes, Bright's, Blood and Nervous Diseases, Female Troubles. Doctor's advice free. Water delivered. Send for Booklet. Melrose Ave. Cars Direct to Springs, Los Angeles





DR. S. ADOLPHUS KNOPF, Captain Medical Reserve Corps, U. S. A., 16 W. 95th St., New York.

Vol. XXXII.

LOS ANGELES, JUNE, 1917

No. 6

#### Editor, DR. GEO. E. MALSBARY.

Associate Editors,

Dr. Walter Lindley, Dr. W. W. Watkins, Dr. Ross Moore, Dr. George L. Cole, Dr. Cecil E. Reynolds, Dr. William A. Edwards, Dr. Andrew W. Morton, Dr. H. D'Arcy Power, Dr. B. J. O'Neill, Dr. Otto G. Wicherski, Dr. Charles H. Whitman, Dr. Edward T. Dillon, Dr. C. G. Stivers, Dr. Boardman Reed, Dr. W. H. Dudley, Dr. J. M. Mathews, Dr. A. J. Cook.

#### THE "PERIOD OF GESTATION."\*

BY W. S. PHILP, M.D., LOS ANGELES.

In choosing the subject of this paper I did not expect to effer anything new; that I cannot do. There are however many points for though and sudicious. care during the "Period of Gestation," hence I considered we might spend a few profitable moments in reviewing some of these, and perhaps be lead to a helpful discussion thereupon. In Dr. Malsbary's able paper "Marriage," read before this society year before last, the benefit to the human race of a careful preparation for this important event, and caution that contracting parties present themselves "void of offense," was duly presented. By such preparation, it seems to me, lies the first important element in establishing a basis for healthy, happy offspring. Given parental bodies free from distinct constitutional or mental dyserasias, and with no local foci of disease, all we further need for this happy issue, is due care along the nine months journey from conception to the matured foetus. This brings us to a hasty review of the "Period of Gesta-

tion." First, I should have us as counselors of prospective mothers, to instill into their minds the sacred nature; and office of metherhood. To cave them possessed with the realization of its great mission and privilege. When a young woman understands her responsibility she more willingly cooperates with her physician in following instructions best suited to further her and her child's interests. Every woman should be instructed to report to her physician as soon as conception is discovered. This early consultation is really very needful, for "nausea," so often distressing and injurious, may be largely forestalled. It is generally regarded, though not proven, that nausea is of toxic origin. If so, early flushing of the emunctories and regulation of the diet and work, is wisdom. Even if nausea is purely reflex or otherwise this procedure is not out of

Frequently the low nutrition during the early weeks of pregnancy leads to an anaemia difficult to fully relieve

<sup>\*</sup>Read before the Los Angeles Obstetrical Society, May, 1917.

later on. I believe anaemic states and the lowered resistance in cell life so caused, conduce to disturbed metabolism, and lead to albuminuria and toxic irritation etc. We have impressed our cases to report early, how shall we best prepare and advise them at this stage? We should take a full case history. We should enquire into environment, and impress on relatives the need of cheerful conduct and avoidance of untoward actions or conversation. Husbands are frequently most grouchy when their wives are in this nervous and often fretful state. Anxiety and should be lifted. Her duties should not cause strain or apprehension. Her exercise should not be that of a house drudge, but exercise enjoyed in pleasant walks or rides in the company of those loved and cheerful. Houses work is good but not if it prove a burden. She should not be left alone all day to meditate and sometimes. suffer distress. Left alone she may prepare no dietary, else a very inefficient one She should be housed and clothed as carefully as possible. Even in poor homes proper heat and ventilation can usually be secured. A small sheet iron excels gas and oil heaters many times. Give instructions on ventilation, especially of sleeping room. Give instructions on underwear, high heeled shoes, proper hosiery, corsets and tight bands. Give instructions on bathing. Stop the morning "plunge," and advise the "sponge," and stop this if reaction seems enfeebled. Advise careful regulation of the bowels and the drinking freely of pure water. Advise plenty of nutritious food of a quality not taxing the digestion. The uterus should be examined and if the cervix is eroded touched with a preparation of iodine and iodide of potash glycerine, and a mild ichthyol, boroglycerid tampon inserted in the vagina. If there is displacement of the uterus or prolapse, the early adjustment of a light and carefully

moulded pessary will prove of benefit and do much to prevent miscarriage in such conditions. At that time each month when the menses would appear. were the woman not pregnant, marital relations should be suspended; often better suspended throughout methinks. Where there is congestive discharge I can see no harm in the use of a mild saline or alkaline warm douche, followed by two hours' rest in the reclining position. If nausea and vomiting are too severe despite our hygienic advice, etc, it is best handled, by determining whether the central nervous system is chiefly disturbed, or the sympathetic paths in the abdomen the more irritable. Sodium bromide, ten to fifteen grains with fluid ext. of Adonis vernalis one or one and one half minims-to prevent the depression of the wromide in peppermint water or essence of pepsin, appears to give real aid to the first. While cocaine muriate gr. one twenty-fourth, hydrocyanic acid dilute, minims one-fourth and bismuth sabnituate ten grs. in mucilage acacia q. s. and peppermint water, taken before food, has worked well for me in these latter cases. The dose of cocaine is so small it has never proved a menace. The bowels must be made to move in such conditions. If mild apperients fail a good clearance with our "hospital cocktail" of oil, lemon and soda is good, followed by the "cascara cathartic'' pill. This pill has never proved injurious but most helpful in my stubborn cases. Be careful of enemas; given in small quantities and nonirritating they will prove of service. Diet during severe nausea is frequently a hard proposition. Clam juice, tomato juice (expressed from the fresh ripe tomato) usually stay; then milk and barley water etc. A grain food such as imperial granum in certified cows milk gives nutriment and is not sweet, hence usually acceptable. Some cases of nausea however give us great trouble. Early in our history as a society this

matter was fully discussed. One of our members found pencilling the external "os uteri" with silver nitrate very helpful. Again John Cooke Hurst, early in 1916 advanced the theory that there is more than a coincidence between the formation and disappearance of the corpus luteum of pregnancy and the disappearance of nausea. Acting on this theory he gives corpus luteum extract and quotes 80% successful results. The stage of nausea over, we come to the period when a woman seems to "vegetate," to feel better than ever in her life, we often hear. She demands food and plenty of it, and often rapidly increases in weight. We watch this time with pleasure but anxiety, for just here the organism feeling the exhilaration of this wonderful stimulus is often overdone. I insist now on care in diet and exercise. Women out in the fields as in Europe, young, hardy and used to toil, and coming from mothers reared similarly, may continue arduous labor and full diet with impuity, it may be. Many of our women however, living the modern American life, need be most carefully advised in these matters. It is our duty to insist on these things, especially the diet. The consumption in this city, of sweets and rich mixtures at sweet shops and soda fountains is I believe excessive. A case I knew ate as she pleased and had an eleven and one half pound baby with severe albuminuria, instrumental delivery and loss of the child. Pelvimetry showed she had a pelvic capacity for a ten pound infant. In her second gestation she was rigidly dieted and had a seven and one half pound child and natural labor of two hours and ten minutes duration. This matter of diet is a much mooted question. I have adopted what is commonly called an "obesity" list, allowing only sufficient carbohydrates and hydrocarbons to supply the proper calories, as far as I can judge. This allows certain green

vegetables, lean meats sparingly, clear soups and fresh fish boiled, eggs and ripe fruits chiefly of the acid variety, with strict regulation of the fats, starches and sugars. I certainly have had vastly better success since following this plan of diet than withholding proteins and allowing starches, fats and sweets the more freely. This is in line with the Russian authority Prochownick. We all know the great importance of watching the urine. The nitrogen output becomes the chief object of our attention and especially the ammonia co-efficient. One to three per cent of the total nitrogen is ammonia in health and should this rise to ten per cent, danger is imminent. There are many items of care that add considerably to the comfort and general well being of the case. Some of these are, oil rubs, sitz baths, care of the perineum and breasts. Guiding the expectant mother in her selection of necessities for her child and for herself, especially when labor is to be at home, is needful. I have a printed list; this is practical and reasonably economical. Sometimes in the primipara pains caused by "settling" are construed as the beginning of labor and we are called only to find a false alarm. Where these persist I find the specific tincture of Blue Cohosh valuable. It stops these pains and if they be the early pains of labor increases them, thus relieving the situation. Let me tell you of an amusing therapeutic suggestion I received from a old practitioner who had had some fortyfive years of hard country practice. This was in my first year of practice and as the good old man had little of the then scientific knowlege I was loath to credit it. He said, young man, if you discover a breach presentation early and give tincture of Pulsatilla in small doses you will have a head. Strange as this may seem the coincidence has been remarkable. Try it. Have your patient report at your office at least monthly till the seventh

month. Then see her at her home, if preferred, but see her twice a month thereafter. It is wise at the seventh month or before to take pelvic measurements. Should our data lead us to believe we will have disproportion between head and pelvis at full term I believe in rigidly withholding, at this period, the carbohydrates, and hydrocarbons, in fact following the "obesity" diet to the extreme. I would like to hear this point discussed, as I have heard it said, the foetus living from the mother's blood will increase in due proportion anyway, I don't believe it. It's best to take regular readings of the blood pressure. Should a patient show danger signs such as increasing blood pressure-especially short pulse pressure-lack of nitrogen output, am-

monia about ten per cent, albuminuria, headaches, oedema, nausea etc., what is the best procedure? In the disscussion of Dr. Sundin's paper on "Eclampsia" it was held, that prevention is better than cure. This certainly is my idea. I would insist on absolute rest, putting the patient to bed, gentle catharsis each morning with salines, and provoking steady mild diaphoresis. Let the diet be liquids, give a glass of water and milk alternate hours. In most instances this line of treatment will be followed by lowered blood pressure, and if near full term successful labor. In earlier cases a slow return to more diet and exercise may be possible; if not, this line of care should be continued to the end of gestation. I thank you.

#### HOW THE STATE PROVIDES FOR ITS MENTALLY ILL.\*

BY DR. L. VERNON BRIGGS, SECRETARY MASSACHUSETTS STATE BOARD OF INSANITY.

(Continued from May Issue.)

There is no reason why clinics should not be established in every city or town of any considerable size where, as is now the case in the present clinics, people in the community who feel they need help on account of some mental disturbance can go, or where the city or the country physician, who has had no special training in mental disease, can send or take his patient for consultation, without charge; where the charity worker or town officer, or other public official may take or send children or adults for examination; where the school committee or school teacher or nurse may take pupils who are backward and whose retardation cannot be explained; and where the friends or members of the families of the patients in the hospitals, who are unable to go to the hospitals to see their friends or relatives, may come and see the physician who is directly in charge of that particular member of their family or of their friends and talk with that

physician and get the latest reports concerning the ones in whom they are interested. This has been a great satisfaction to those who are unable to go to the hospitals, and of value to the hospitals, in that much can be learned of the family history and the normal tendencies of the patient from the members of the family visiting the clinic, thus helping the treatment.

At each of these clinics, beside the physicians, there is a social worker, who obtains histories of the families and records what their previous surroundings and normal conditions wers, and in many cases facts which led up to the mental illness, which could be obtained in no other way. This social service is being developed as fast as the Legislature will give the money for its development, and the Board has urged the appointment of a Director of Social Work to help the hospitals organize and amplify this work.

Just what the Social Service Worker

<sup>\*</sup>Read before the Evans Memorial Meeting of the Mass. Homeo. Hospital.

does, and the value of her work to the State in the way of prevention, is shown in these plates which I am about to have placed on the screen:

In regard to treatment: There is a general impression that nothing is done in the way of treatment for the mentally ill in our State Institutions, and that patients receive only board and lodging. This is, in some cases, true and is due to several factors:

First, we may say, lack of funds to properly extend medical and surgical aid to these people.

Second, lack of funds to employ physicians skilled in the treatment of mental disease, and to retain them after we have been successful in securing them. In no branch of the profession has there been such a field as this for untrained and unskilled physicians.

This present Board of Insanity has set about to raise the standard of the medical men who hereafter shall come in contact with the State's mentally ill, and all physicians who have not had previous experience in the care and treatment of mental disease are obliged to take a special course at the Psychopathic Hospital. That the poor man, as well as the rich, may enter into this field of medicine, the Board has arranged with the Psychopathic Hospital to give this course free of charge to all candidates for State Hospital positions, and during the course they receive board and room free.

The young men who are now coming into the service should be of great help to the Superintendents, whose training and experience merit the best of assistants, and with good tools better work is surely to be done, as, for instance, the work which is now being done by the Board's Special Investigator of Brain Syphilis. This physician visits all the hospitals and is introducing modern treatment in brain syphilis, including many cases of general paralysis, which until recently was supposed

to be an incurable disease. Some most encouraging results have been obtained, but it is too early to publish statistics. The Board has increased the work of the Pathological Department, appointing additional physicians skilled in the study of disease, and the results of this work are most encouraging.

The giving up of restraint in the hospitals has increased the use of the continuous bath, so that now excited patients, instead of being restrained mechanically, as was formerly the custom, are allowed to get in and out of the tubs of water, and to lie in the bath, where they soon feel the beneficial effects of the water. They often ask to be allowed to lie in these tubs, and frequently patients remain in the baths for many hours of the day or night.

Occupation is more and more a feature in a therapeutic and curative way, and teachers are being employed to instruct many patients in arts and crafts and industrial work, so that, instead of sitting on benches and around the dormitories and wards day after day doing nothing, they are interested in some occupation, which will also interest their neighbor, and instead of becoming quarrelsome and getting tired and cross with nothing to do, today in the ward where the patients are occupied-in knitting, basketry, beadwork, lace-making, pottery-work playing games-the whole atmosphere of the ward is changed from one of depression to one of more or less cheerfulness. These teachers are also instructing the nurses and the Board have in mind the purpose of this instruction, which is that the nurses shall become teachers and helpers to the patients, rather than keepers and overseers.

This Board found epileptics, insane, alcoholics, feeble-minded and defective delinquents more or less associating in the same hospitals, and some of these classes on the same wards. It found

feeble-minded girls and defective girls as young as 15 and 16 years of age in wards with the insane adults. One of the first things we did was to plan a reclassification of patients, and we have now accomplished the removal of virtually all the epileptics to two hospitals, with the idea of giving them special treatment as soon as the money can be obtained.

We have also removed from the hospitals to one ward of one hospital all the women inebriates. This is the first classification of women alcoholics and the first segregation of them that has ever been made by the State of Massachusetts.

The Board found that many of the relatives and friends of the patients could not see the patients in whom they were interested because the visiting days were not convenient, without loss of time and possibly loss of position if they made frequent visits. They may now visit the State Hospitals every day in the week and may see their relatives and friends when it is not a sacrifice to do so. This hospitality will do much, we trust, to disarm ignorant public criticism. We want the public to know our institutions and the effort they are making to do intelligent humane, scientific work for this muchneglected class of the State's wards. Not until we have public sympathy can we expect the Legislature to grant us the necessary appropriations to carry on this work efficiently.

The paroling and allowing patients visits has been encouraged and is increasing. Under our laws a superintendent may allow a patient to go out of the hospital on six months' leave of absence for trial, to be returned at any time within the six months if it is found that he is not ready to take up his life in the community. No one should ask that this privilege be granted unless the Superintendent feels confident that it is for the best good of the patient. It too often happens

that the friends desire the patient out of the hospital before the time comes when it is best that he should go. On the other hand, it is only too common to find sons and daughters anxious to shift the care of the harmless, senile parents upon the State, who might much better be cared for in their homes.

Accommodations are being prepared in one of the hospitals to take care of that class of patients which has been sent to us, called "defective delinquents." These wards of the State ought not to be associated with the mentally ill, but are so defective from birth that they are not tolerated in the community, and if discharged into the community are returned again and again. They must be taken care of by the State and should be provided for in groups by themselves, where they will not come in contact with the really mentally ill persons, and where the mentally ill will not have to come in contact with them.

The Board also is planning to remove the feeble-minded from the State Hospitals, and is now picking out a great many of these cases from certain wards of the hospitals and placing them by themselves in a closer and better classification.

As soon as the new Metropolitan State Hospital is built, or there is room for more patients in the extensions of any of the other State Hospitals, the Board will remove many cases from the Bridgewater State Hospital (for the criminal insane) who can be taken care of in our State Hospitals. There are many patients in this hospital who are not really criminals. Nearly 25 per cent. are feeble-minded, and many are defective delinquents and should always be looked after. On investigation the Board found 16 cases there who were never criminals, and who had no criminal record. Some of these patients had been taken to Bridgewater from other institutions to help in the

work until they got enough criminally insane there to perform the necessary ward duties. These were apparently forgotten until the present State Board of Insanity was appointed and made its investigation.

This Board has extended its work, at the request of the Prison Commission, to the inmates of the State Prison, and has had examinations made of prisoners. The result shows that 22 per cent, of these men cannot be held responsible for the crimes which they have committed. They are feebleminded, even to the point in some cases of being imbeciles, and to turn them again loose into the community to associate with the depraved class that lead them into trouble is a crime for which Massachusetts ought not to assume the responsibility.

The present Board is encouraging more out-of-door life and more open wards. There are in some of our State Hospitals wards and buildings which are not locked, neither the doors nor the windows—and the patients come and go as they please. There should be more of this. A majority of the people now confined in our State Hospitals should be allowed the freedom of the grounds without the slightest

fear of their running away or doing harm to themselves or others. Only about 8 per cent. are really violent and dangerous. Our Superintendents, who have appreciated this fact, are today encouraging out-of-door sports and games and work.

One of the results is the formation of baseball nines in the different hospitals, and now there is an interchange of games between the nines of some of the hospitals. The nine of one hospital visits another hospital and plays one afternoon, and later on the latter nine returns the visit and plays the first hospital's nine. This interchange between teams is going to be more frequent and brings much interest to the patients who can watch these games. one of the last games of the autumn, fifty patients of the Medfield State Hospital were allowed to accompany the baseball nine to Taunton the afternoon that Medfield played Taunton. This, and the privilege of attending the dances in the evening, and private theatricals and moving picture shows, are great incentives to patients to get hold of themselves, to control themselves and to co-operate with the physicians in the work of getting them back into the community.

#### TREATMENT OF IVY POISONING.

BY W. H. DIEFFENBACH, M.D., NEW YORK.

Of the various dermatitis venenatae, the most common, the rhus toxico-dendron, or ivy poisoning, proves an annual source of annoyance to many who spend their vacations in the country and also to the country-folk themselves. A common affection such as this has, in different hands, been treated successfully in many ways and it is surprising to note the many recommendations for its amelioration or cure.

Almost every physician has some pet application which he thinks influences the dermatitis favorably.

Thus the old-fashioned lead wash, or

lead and opium wash, grindelia robusta solution, sanguinaria solution, the tincture of jewel-weed, quinin solutions, permanganate solutions, hypo-sulphite of soda, boric acid, antiphlogistine, zinc oxid, calamin, carbolic solutions, zinc sulphate solution, petrolatum, buttermilk, lime water, and lastly the frequently recommended sal-ammoniac solution.

There are, no doubt, many preparations omitted from this list, but this compilation will convince you of the fact that no specific, per se, has been universally accepted for the treatment of this annoying affection.

Accepting the statement that a somewhat volatile substance, "toxicodendric acid." is the cause of the irritation and through penetration of the skin causes the severe dermatitis ascribed to it, it appeals to me strongly that any substance which will neutralize this acid ought to be considered as a palliative measure. This suggests the use of almost any alkalin solution, and the recommendation of Dr. Geo. Leitner of Piermont, N. Y., to use a strong solution of sal-ammoniac has in my hands proven palliative in a more efficient manner than other preparations used previous to this recommendation. However, this local application does not immunize from subsequent attacks, and the suggestion of many to chew some of the leaves of this ivy or take rhus tox. in dilution internally does not meet the condition in every case and is at best empirical.

My own experience with rhus poisoning is herewith briefly recited. Until a few years ago, although visiting a country every summer where sumach and ivy-rhus abounds, no special skin irritation was ever noted until a few years ago, when several minor attacks of the fingers were quickly palliated with soda solutions. In the early summer of 1914, a primary attack was aborted with local soda applications, to be followed in quick succession by almost weekly recurrences. The attacks would subside but would recur with violence whenever the country was revisited. A very severe attack involving the face and neck, the fourth during the month, was treated by a colleague, Dr. L. B. Couch of Nyack, N. Y., with carbolic acid and alcohol, as the attack simulated erysipelas. This heroic treatment caused exfoliation of all the skin treated but produced, like all other methods, only temporary relief.

Seeking some method to immunize myself from these recurrences, Dr. Guy B. Stearns of New York City

was consulted and he devoted much time to the selection of a remedy fitting my symptoms. This effort was followed by two subsequent attacks. and while reading one of Dr. Charles H. Duncan's articles on "Autotherapy" and "auto-lacto therapy" the thought occurred to me to apply this method in my case. Accordingly one of the cows of the farm was fed on a mixture of grass and poison-ivy plant and the milk of this cow was imbibed the next day. This test occurred in August and was followed by apparent immunity for the rest of the summer and fall. About one pint of milk was taken for two days and no other treatment instituted. This immunizing milk treatment was also tried in the case of a girl of twelve years of age who had had a number of ivy attacks, and immunity was established in this instance also, so that it appears as if Dr. Duncan's theory might find successful application.

During the present summer, I have had three slight attacks involving the fingers only, so that immunity as indicated above is not permanent. these attacks sal-ammoniac solution (one tablespoonful to the pint water) was applied by means of compresses for a number of hours or over night and this was followed by the application of hot antiphlogistine poultices to restore the integrity of the In my judgment, the use of antiphlogistine in these cases is of much benefit in improving the local circulation ofter the rhus poison has been neutralized by the sal-ammonia and its use will tend to prevent recurrences to a great extent. Another point to consider in order to avoid recurrences is thoroughly to steam, sterilize or rub with some strong alkalin solution all particles of clothing, especially the shoes worn during the attacks, as contact with these articles may be the means of again setting up the dermatitis.

### R SALE—A SPLENDID OPPORTUNITY

of the best located and most thoroughly equipped Sanitariums offered for sale on very reasonable terms and offers a splendid lity for investment for some qualified physician or small corIt is located on one of the most beautiful and pouplar streets residential district of Los Angeles, half a block from the elector. It is quiet and yet within ten minutes' ride of the center of It is within a few minutes' walk of the best schools, churches, braries and finest residences of the city.

grounds are spacious and beautiful. They have numerous swings, as and cosy corners, where the convalescents can rest and enjoy less. The buildings are commodious and sanitary in all respects. The buildings are commodious and sanitary in all respects receiven private rooms for patients, with accommodations for ten. A bright dining hall, beautiful parlor, good rooms for the half help, making it convenient and homelike for the resident it rooms for male and female patients, electrical and hydroapparatus, make it easy to care for all classes of work. The sare steam heated throughout, have hot and cold water and niged with a view to economy and ease in management. This mas been under one management from the time of inception, ago, has done a good business, and is now filled with goodlatients. atients.

Management will gladly mail you a booklet giving a fuller on of the institution.

2 \$25,000, part cash. For terms and full particulars address: rman Sanitarium, 726 East Adams Street, Los Angeles, Cal.





A MEDICAL, CLIMATOLOGICAL AND SOCIOLOGICAL MONTHLY MAGAZINE.

This journal endeavors to mirror the progress of the profession of California and Arizona.

Established in 1886 by Walter Lindley, M.D., LL.D. DR. GEORGE E. MALSBARY, Editor and Publisher.

Associate Editors,

Dr. Walter Lindley, Dr. W. W. Watkins, Dr. Ross Moore, Dr. George L. Cole, Dr. Cecil E. Reynolds, Dr. William A. Edwards, Dr. Andrew W. Morton, Dr. H. D'Arcy Power, Dr. B. J. O'Neill, Dr. Otto G. Wicherski, Dr. Charles H. Whitman, Dr. Edward T. Dillon, Dr. C. G. Stivers, Dr. Boardman Reed, Dr. W. H. Dudley, Dr. J. M. Mathews, Dr. A. J. Cook.

Address all communications and manuscripts to

EDITOR SOUTHERN CALIFORNIA PRACTITIONER.

Subscription Price, per annum, \$2.00.

1414 South Hope Street, Los Angeles, Cal.

#### **EDITORIAL**

#### TYPHOID FEVER.

Almost daily we hear criticisms of the Los Angeles City water supply. Our personal observation had told us that the death rate from Typhoid fever was very small but we had not noticed any reliable report, consequently we wrote Health commissioner, Dr. L. M. Powers, asking for data, and he sent us the following table.

As will be observed from the report, in the city of Los Angeles, during the year of 1916, there were only 14 deaths

from this disease. It will also be noticed, in this table that the fatality per 100 cases is lower than that of any other city of its class. The water supply of this city coming from its source in the Sierra Nevada Mountains, 250 miles away, is admirable, and instead of its being traduced, the people should be encouraged to drink of it more freely.

New York also has a wonderful water supply, and as will be noticed, her death rate from Typhoid fever, comes next to Los Angeles.

#### TYPHOID FEVER.

Reported Prevalence for the Year 1916 in Cities Over 500,000. (From Report U. S. Public Health Service.)

City	Estimated population July 1st, 1916	Cases	Deaths registered	Indicated case rate per 1000 inhabitants	Indicated fatality rate per 100 cases	Indicated death rate per 1000 inhabitants
Baltimore, Md	589,621	776	106	1.316	13.66	0.180
Boston, Mass	756,476	185	26	.245	14.05	.034
Chicago, Ill	2,497,722	1,034	129	.414	12.48	.052
Cleveland, O	674,073	209	36	.310	17.22	.053
Detroit, Mich.	571,784	417	87	.729	20.86	.152
LOS ANGELES, CAL	503,812	126	14	.250	11.11	.028
New York, N. Y	5,602,841	1,617	215	.289	13.30	.038
Philadelphia, Pa	1,709,518	740	128	.433	17.30	.075
Pittsburgh, Pa.	579,090	274	50	.473	18.25	.086
St. Louis, Mo	757,309	580	71	.766	12.24	.094

### DR. S. ADOLPHUS KNOPF DOING HIS BIT.

The Los Angeles Times says: "Dr. S. Adolphus Knopf of New York City, one of the most distinguished specialists on tuberculosis in the United States, and author of several works on that subject, is now a captain in the army, and writes to a friend here in Los Angeles:

"'These are indeed sad and serious times, and to one whose cradle stood in Germany they are doubly painful. But, as President Wilson has said, "This is not a war against the German people; it is a war for human liberty, to free the German people as well as to free the whole world from Prussian domination.""

"'So I must be brave and gladly do my duty wherever I may be called to perform it. The government does not want to send me to the front, claiming that I shall be needed more here when our boys come back sick or wounded.

"In the meantime I am drilling, attending lectures on military hygiene and military surgery, and studying recruiting work, with the view to prevent entrance of tuberculosis recruits into the army.

"'I made some suggestions concerning this important topic, to Surg.-Gen. Gorgas, and it is very gratifying to know that they have been accepted and put into operation."

The readers of the Southern California Practitioner know that Dr. Knopf is able, sincere, earnest and patriotic.

It was in Los Angeles that he began his eminently successful medical career and we claim him as one of us.

### EDUCATIONAL REQUIREMENTS FOR NURSES.

Dr. Albert Shiels, the able Superintendent of the public school system of Los Angeles, in a recent address at the graduating exercises of the Training School for Nurses, of the California Hospital, referred particularly to the unreasonable requirements that were now demanded by nurses organizations, and through them, by the law in several states. He facetiously said that if they continued increasing the requirements, a nurse, by the time that she graduated, would be so old and weak, that she would not be able to turn a patient over in bed.

Today when nurses are being vitally needed all over the world, many of the states, through the influence of nurses organizations, are demanding that a nurse should have had a High School education, before being admitted to a training school. This will cut down the number of nurses attending our training schools by at least one half, and that just at the time when there is a scarcity.

The nurse who wishes to be a head nurse, or superintendent, should have this preliminary education. It is, we will allow, some advantage to any nurse to have such an education; but it is by no means a necessity. Many a worthy, ambitious young woman will be prevented taking up this noble profession, by these constantly increasing demands.

We hope that the thought Dr. Shiels dropped has fallen in fertile soil, and will produce good results.

The great aim of all who are interested in training nurses, should be to give every worthy woman who desires it, an opportunity to equip herself for this profession, and by no means to increase the obstacles to the achievement of her worthy ambition.

The training schools for nurses are doing their bit not only in this war but in civilization and they should not be shackled by either pedantry or bigotry.

### ETHYL HYDROCUPREIN (OPTO-CHIN HYDROCHLORICUM.)

This substance is an alkaloid obtained "It is the from the cuprea bark. methyl derivative of quinine which has been reduced by the introduction of a further two hydrogen groups''-Amman. The hydrobromid occurs as a white chrystalline powder and is soluble in ten parts of water, the solution having the same fluorescent appearance as that of quinine. Laboratory experiments with this drug early showed its bactericidal power, especially against the pneumoccocus, and inasmuch as this organism is the chief offender in a virulent form of ulceration of the cornea, the serpingninous ulcer, this was the first ocular condition in which it was used. In one and two per cent solutions it was successful in destroying the organism. In acute catarrhal conjunctivitis, also of pneumococcic origin, its use appeared equally efficient, and the relief prompt. Feeling that optochin might act successfully also against the gonococcus, Wyler of Cincinnati used it successfully in two cases, so far as the infection was concerned. But soon after the disappearance of the acute symptoms and signs of the infection, infiltration and ulceration of the cornea took place with loss of the eye in each case within twenty-four hours, which gave the reporter's enthusiasm a rather severe jolt. The same reporter found in several cases of spring catarrh, which is usually anything but tractable, most satisfactory results, which makes him very hopeful of its future in this discouraging disease. Another therapeutic use of ethyl hydrocuprein which has not to the present time been brought prominently before the profession is its anesthetic properties. Experiments made and published three years ago by Morgenroth and Ginsberg showed that the higher homologues of the series such as propyl hydrocupreine. and isopropyl hydrocupreine have still

greater anesthetising power, and the investigations of the authors show that, for instance, isoamyl hydrocuprein is at least twenty to twenty-five times more effective than cocaine. anesthetic action of these substances is not confined to their effect upon corneal tissue, but in infiltration anesthesia is equally efficient. The author finds that the use of isoamyl hydrocuprein is associated with a considerable amount of hyperemia, and thinks that adrenalin added to the former will prevent this. These experimenters also found that anesthesia produced by this series was continuous for a prolonged period, as compared with the more common local anesthetics; for instance, the twenty per aqueous solution of ethyl hydrocuprein hydrochloride produced an anesthesia of the cornea which continued for ten days, and was present to some extent on the fifteenth day. They found that a ten per cent solution produced an anesthesia lasting four days, and a two per cent solution produced complete anesthesia in three minutes which lasted from one to two hours. Should these statements upon repeated experiments and practical use prove true, and the drugs become available, it seems that their use might be infinitely multiplied in many departments of surgery, and we have in mind their practical use in the removal of tonsils as well as some other throat operations followed by considerable discomfort over some days following the operation under local anesthesia. Some observers report a hypervascularity of the eye after the use of solutions of ethyl hydrocuprein. though this is mentioned by the greater number of those reporting cases. It seems quite possible that this may have occurred in the use of the basic salt while others have used the hydrochloride, or the reverse may be true. The proved efficiency of ethyl hydrocuperein against the pneumococcus early suggested its use in pneumonia, and therapeutists were not slow in making use of it for that purpose. From the study of reported cases, there is little doubt that it shortens the course of the disease. but the rather large number-14.3 per cent-of cases of optic atrophy which have been observed with its use makes the cautious practitioner hesitate in its use. In fact, after reporting one case, George H, Oliver in the British Med, Jour., Oct. 1916, states that "ethyl hydrocupreine is a dangerous drug, and its internal administration is to be carefully avoided. It may be discovered that much smaller doses than those given heretofore will suffice to

destroy the pneumococcus; indeed it has been shown by Hemry F. Moore in his experimental studies with this drug that it inhibits the growth and kills pneumococci in vitro in very considerable dilution and that the serum of rabbits which have been previously treated with a single dose of ethyl hydrocuprein exerts a bactericidal action on, and later inhibits the growth of pneumococci in the test tube.

It should be stated in reference to its use in the eye that there is no report of distrubance of vision after its use, either when applied to the cornea or by subconjunctival injection.

W. H. D.

### EDITORIAL NOTES

Dr. L. A. Merritt of Mass., has located in Alhambra, Cal.

Dr. Chas. Teubner, formerly of Oxnard, has located in Los Angeles.

Dr. W. J. Lewis of Ventura, has reported to the Military Authorities in San Francisco for service.

Free dispensary of the College Hospital at Santa Barbara, was recently opened for public use.

Dr. C. D. Lockwood of Pasadena, who has been commissioned as Captain in the Army, has been called to Washington.

Dr. C. S. Stoddard of Santa Barbara is recovering from a severe injury to the knee, the result of a fall from the step of his home.

Dr. William Watt Kerr, one of the great stalwart physicians of California, died at his home in San Francisco, on April 26, 1917.

Dr. J. W. Wood, pioneer physician of Long Beach, has been quite ill for some time, although the last report is that he is slowly improving.

Dr. Thomas W. Huntington of San Francisco, was elected president of the Surgical Association at the meeting in Boston, which closed on June 2, 1917. An honor worthily bestowed.

Dr. Robert M. Dodsworth of Long Beach, has been notified that he has successfully passed the examination for appointment in the Medical Officers Reserve Corps.

Dr. Dudley Fulton of Los Angeles, was recently the guest of honor at a joint meeting and dinner of the Santa Barbara and Ventura Medical Societies which was held at the Arlington Hotel in Santa Barbara.

Dr. D. D. Comstock and Dr. Belle Wood-Comstock for seven years with the Glendale Sanitarium, announce that they are now engaged in general practice with offices at 512-514 Citizens Savings Bank Bldg., Pasadena, California.

Dr. C. Guy Reilly, 1114 So. Hoover Street, a resident of Los Angeles for the past 17 years, died at his home, May 26, 1917. Dr. Reilly graduated from Missouri Medical College, Class of 1883.

The Los Angeles City Council has authorized Health Commissioner Powers to appoint a Japanese nurse who will devote her time to supervising investigation of tuberculosis conditions among the Japanese in the City of Los Angeles.

Dr. J. Rea Cowan has located his offices in the Medical Bldg., at 1501 South Figueroa Street. This is one of the most perfectly arranged office buildings for physicians, and is practically filled, there being already 12 physicians located here.

Dr. Joseph Carter Hearne, age 66, a pioneer physician of San Diego, died at his home on May 8, 1917. He was a native of Kentucky, but had been practicing in San Diego for 25 years. He was an aggressive, enterprising, fearless practitioner and had an extended influence, and an extensive practice.

It was an impressive sight on June 7th, when 484 young men and young women, in cap and gown, marched into the auditorium to receive their diplomas from Dr. Geo. F. Bovard, President of the University of Southern California. Bishop Adna W. Leonard delivered an eloquent address, dealing principally with the duty of the young man to his country at this critical period.

The Industrial Accident Commission of California has awarded \$20.80 a week, the maximum allowance for total disability, to C. C. H. Thomas, an inspector employed by the Associated Pipe Line Company in the San Joaquin Valley, because Thomas has "sacrolliac slip." The disease, is a disorder of the spine, is said to have been caused by too much riding in an automobile while doing inspection work.

Dr. J. F. Friesen has announced that he is off for Chicago and New York for two months for study. In fact, he is to marry Miss Huntington in St. Paul, Minnesota. Miss Huntington is a teacher in the Minneapolis Institute of Fine Arts. Remember that we give you these items only in strictest confidence, believing that you will join with us in extending our congratulations and best wishes.

Dr. F. C. Renfrew, of Long Beach, and Dr. Pickney French, of Los Angeles, were appointed chief examining physicians for the municipality in the Auditorium damage suits of persons alleged to have been injured in the Empire Day accident of the 24th day of May, 1913, in preparation for the trial and adjustment of damage suits brought by such persons against the City of Long Beach.

In view of the recent appointment of Dr. Frank Gordon as a member of the Humane Animal Commission, Mrs. Rosemonde Wright, who has been president of the commission, has tendered Mayor Woodman her resignation, to take effect forthwith. Mrs. Wright says that owing to Dr. Gordon's appointment she cannot consistently remain longer identified with the commission. Dr. Gordon is said to be a vivisectionist and have ideas diametrically opposed to those of Mrs. Wright. Mayor Woodman said he would accept the resignation.

The Medical Record (New York) of May 26, says:—Dr. Winslow Anderson of San Francisco died in New York City on May 8 at the age of 57 years. He was born in Hillsborough, Mass., and was graduated from the medical department of the University of California in 1884. After graduation he studied in London, obtaining membership in the Royal Colleges of Physicians

and Surgeons. He then returned to San Francisco and entered upon the practice of his profession.

From 1896 to 1911 he was professor of gynecology and abdominal surgery in the College of Physicians and Surgeons in that city. He was surgeon to the Sierra Railway Co., abdominal surgeon and gynecologist to the San Francisco Hospital, and was formerly a member of the California State Board

of Health and of the Board of Medical Examiners, and surgeon general of the National Guard of the State of California. He was editor of the "Pacific Medical Journal" and author of a work on the Medical Springs and Health Resorts of California. He was an ex-president of the American Medical Editors' Association, and held membership in a number of medical and sanitary societies as well as political and social organizations.

### **BOOK REVIEWS**

CATARACT, Senile, Traumatic and Congenital. By W. A. Fisher, M.D., Professor of Ophthalmology, Chicago Eye, Ear, Nose and Throat Hospital. Chicago: Published by the Chicago Eye, Ear, Nose and Throat Hospital. 1917. \$1.50 postpaid.

Fisher has a positive excathedra style of writing that is very attractive. This little monograph will prove especially valuable to those interested in his method of intracapsular extraction of senile cataract, a modification of the Smith-Indian operation that is becoming very popular. This is a great advance over the old watchful waiting for maturity. Fisher describes a method of acquiring technique upon the eye with the aid of four week old kittens, which is a much better use than many such kittens serve.

PULMONARY TUBERCULOSIS. A handbook for students. By Edward O. Otis, M.D., Professor of Pulmonary Diseases and Climatology, Tufts College Medical School, etc., etc. W. M. Leonard, publisher, Boston. 220 pages, \$1.75.

This is a valuable monograph by a distinguished writer and is entitled to a large sale. Succeeding editions will probably evidence greater familiarity with the x-ray in diagnosis. However, it is a safe volume to place in the hands of students, and contains much well worth while to the physician in practice.

STARVATION (ALLEN) TREATMENT OF DIABETES. By Lewis Webb Hill, MD.., Junior Assistant Visiting Physician, Children's Hospital, Boston; Alumni Assistant in Pediatrics, Harvard Medical School; and Rena S. Eckman, Dietition, Massachusetts General Hospital, Boston, 1911-1916. With an introduction by Richard C. Cabot, M.D. Third edition. Boston: W. M. Leonard, Publisher. 1917.

The numerous diet tables and suggestive menus are of great practical value in carrying out the Allen treatment of diabetes.

QUIZ-COMPEND. PHYSIOLOGY. Dr. Brubaker. Fourteenth edition. \$1.25 net. P. Blakiston's Son & Co., 1012 Walnut St., Philadelphia.

This is the latest edition of the well-known Blakiston compend on physiology. No quiz complete without one.

CLINICAL BACTERIOLOGY AND HAEMATOLOGY, for Practitioners. By W. D'Este Emery, M.D., B.Sc., Lond., Directory of the Laboratories and Lecturer on Pathology and Bacteriology, King's College Hospital, and Lecturer on General Pathology, London School of Medicine for Women; formerly Hunterian Professor, Royal College of Surgeons. Fifth edition. Philadelphia: P. Blakiston's Son & Co., 1917, \$2.75 net.

In this edition, some changes have been made that better adapt the volume as a general laboratory handbook. It will be found valuable in the general practitioner's laboratory. Home Phone 31156.

Sunset East 333.

### "THE ROSENA REST RETREAT"

A private home, with experienced nurses, for the care and cure of nervous and mental patients. A delightful, permanent home for chronic cases.

Address:

THE ROSENA REST RETREAT,

2814 Downey Ave. (now N. Broadway), Los Angeles, Cal

References:
Dr. H. G. Brainerd, Exchange Bldg.,
Third and Hill, Los Angeles, or any of

the Leading Hospitals.



# RADIUM SULPHUR SPRINGS

It Sparkles and Foams Like Champagne
Hot Baths and Treatments cure Rheumatism, Sciatice,
Neuritis, Paralysis, Locomotor Ataxia, Poor Circulation,
Heart, Stomach, Liver, Kidney, Diabetes, Bright's, Blood
and Nervous Diseases, Female Troubles. Doctor's advice free. Water delivered. Send for Booklet.

Melrose Ave. Cars Direct to Springs, Los Angeles

GENERAL MEDICINE. Billings. Practical Medicine Series, 1917. Volume I.

This volume is edited by Frank Billings, M.S., M.D., head of the Medical Department and Dean of the Faculty of Rush Medical College, Chicago, Illinois, assisted by Burrell O. Raulston, A.B., M.D., Resident Pathologist, Presbyterian Hospital. The series is under the general editorial charge of Charles L. Mix, A.M., M.D., Professor of Physical Diagnosis, Northwestern University Medical School. The price of this volume is \$1.50; the ten volumes of the series, covering the entire field of medicine and surgery, sella for \$10.00.

CASE MISTORIES IN OBSTETRICS.
Groups of cases illustrating the fundamental problems which arise in obstetries. By Robert L. DeNormandie, A.B., M.D., F.A.C.S., Assistant in Obstetrics, "Harvard Medical School, Assistant, Physician, Boston Lying in Hospital, Surgeon to the Gynecological Depart

# Horlick's the Original Malted Milk

This is the package. Others are substitutes.



Palatable, agreeable and beneficial to infant, invalid and convalescent.

Horlick's Malted Milk Co., Racine, Wis.

ment of the Boston Dispensary. Second edition. Boston: W. M. Leonard, Publisher, 1917. Price \$4.00.

We are glad to see a second edition of this, one of the latest volumes of the Case History Series. The chief alterations are in the section on Accidental Hemorrhages of Pregnancy, the section on Sepsis, the section on Pyelitis in Pregnancy, and the section on Scopolamine Morphine Anesthesia. It is a work that will appeal to those interested in obstetrics. It is quite justifiable for the author to speak excathedra.

# INDISPUTABLE AUTHORITATIVE EVIDENCE.

Hayden's Viburnum Compound is compounded from remedies of acknowledged therapeutic value and so account the leading therapeutists of this country. The therapeutic action of the principal ingredients is attested to and so stated in recognized text books upon Meteria Medica and Pharmacology.

A recent Brochure just issued by the New York Pharmaceutical Company, Bedford Springs, Bedford, Mass., presents not only the conditions in which Hayden's Viburnum Compound has proven to be of particular service, but also an abstract from leading authorities attesting to the therapeutic activity of its principal component parts. A card addressed to the above named firm will bring you this booklet.

# X-Ray Laboratory

Radiography of the Chest and Gastro-Intestinal Tract

X-RAY DEPARTMENT of the CALIFORNIA HOSPITAL

#### A SERVICEABLE BOOKLET.

A new edition of their brochure on ampules is announced by Parke, Davis & Co. The work contains seventy-six pages and embodies a complete list, with detailed descriptions, of the sixty odd ready-to-use sterilized solutions in ampoules supplied by this house. It has an important chapter on hypodermatic medication in which the advantages of this method of administering certain soluble agents are clearly and convincingly outlined. quote in this connection a significant paragraph: "When a drug suitable for the purpose is injected under the skin or into a vain, its physiologic and therapeutic effects are produced in the fullest degree, in the shortest time. and in the most characteristic form. It therefore follows that the therapeutic action of a drug may differ in degree and in kind, according as it is given by the stomach or placed more directly in the blood stream. The hypodermatic administration of certain drugs has developed very valuable therapeutic properties which their administration by mouth had not even suggested." A notable feature of the booklet is its therapeutic index, which converts it into a useful work of reference. Parke, Davis & Co., invite requests for this brochure from all physicians and surgeons.

During the year ended June 30, 1916,—26,385 persons died in India from snake-bite. During the past five years tigers have killed 3,682 persons in British India, while elephants, lions and other animals have killed nearly 6,000 more. The government pays a bounty for killing these animals. During 1915 bounties were paid for killing 1,582 tigers, 6,623 leopards, 2,775 bears, 2,191 wolves and 184,663 snakes.



Vol. XXXII.

LOS ANGELES, JULY, 1917

No. 7

Editor, DR. GEO. E. MALSBARY.

Associate Editors,
Dr. Walter Lindley, Dr. W. W. Watkins, Dr. Ross Moore, Dr. George L. Cole,
Dr. Cecil E. Reynolds, Dr. William A. Edwards, Dr. Andrew W. Morton,
Dr. H. D'Arcy Power, Dr. B. J. O'Neill, Dr. Otto G. Wicherski,
Dr. Charles H. Whitman, Dr. Edward T. Dillon, Dr. C. G.
Stivers, Dr. Boardman Reed, Dr. W. H. Dudley,
Dr. J. M. Mathews, Dr. A. J. Cook.

#### 9 70) DEFECTIVE CHILD FROM THE STANDPOINT OF THE . INTERNAL SECRETIONS.

BY HENRY R. HÁRROWER, M.D., F.R.S.M. (LOND.,) LOS ANGELES.

requiring special attention, as a colleague appreciative of the sensibilities of the parents calls them, are practically without exception endocrine cases.

There are several comprehensive classifications of defectives; and the methods of measuring their physical and mental capacity, or lack of it, enables us to place a given case in the same class as others affected in a similar degree. This, however, does not indicate the etiologic factors influencing the child and, hence, the proper treatment.

It is true the children handicapped with hereditary syphilis, epilepsy or any transmitted disease or disease tendency, more often are considered as syphilitic or epileptic rather than as suffering from dyscrinism. Nevertheless the fact remain that in all cases the endocrine element is both present and prominent irrespective of the simplicity or complexity of the trouble and its cause.

With our present knowledge we may safely say that the treatment of de-

DEFLETLVE children, or "edijden, fective children offers better prospects of success than ever before. Of course what is known as feeble-mindedness or amentia may be more than a mere "deficiency," for the cerebral development may be imperfect and here there is little or no hope for a successful outcome.

> In the past few years considerable interest has been aroused in the relation of endocrinology and the study of defective children; and it is surprising how many of the stigmata which cause us to place children in this category are connected with abnormal endocrine function and, too, how frequently on investigating their antecendents we uncover a more or less well marked endocrine disorder in the parents or grandparents which properly may be regarded as a part of the cause of these unfortunate conditions in their offspring.

> The hereditary phase of the relation of dyscrinism to defectives will be referred to again later as it seems to be a hopeful phase of a very hopeless subject.

It will be my endeavor here to lend emphasis to the importance of considering this subject from the chemical rather than the physical standpoint, and to secure more attention by readers to the study of the ductless glandular manifestations, obvious or insidious, in defective children.

There are almost as many forms of developmental anomalies in children as there are glands of internal secretion. Chief among them all are those relating to dysthyroidism. The cretin, well known to be typical of a large class of deficients, is an endocrine case pure and simple, the syndrome being definitely traced to deficient thyroid activity and, fortunately, being decidedly benefited by substitution therapy or the administration of the missing chemical substances. In fact a large part of our first knowledge of the clinical importance of dysthyreidism resulted from the studies of George Murray, Sir William Gull and Theodore Kocher some twenty-five years ago upon individuals who were all in one way or another mentally and physically defective.

The literature upon the retarded, backward or deficient child recently has begun to contain references to the syndrome "hypoplasia" and according to Noble (1) the hypoplastic individual is one whose nutrition and development is below par, the condition being congenital or acquired during infancy or early childhood. There are varying degrees of hypoplasia reaching from backwardness which is not appreciated until the child has been some time in school, to the serious organic dyscrinism which is sometimes called infantilism and sometimes mal-development.

It is difficult to say how much of the symptomatology of this condition of hypoplasia may be referred to the thyroid gland. Much of it at least is of thyroid origin and Hertoghe (2) refers to it frequently in his writings and uses the term "thyroid inanition"

as indicating a condition of slow starvation and inactivity without particularly obvious charges in contour or weight. Function, however, is much below par and it is but a short step from the unappreciated "forme fruste" of thyroid insufficiency to the myxedematous idiocy described by Brissaud, or the Lorain type of infantilism, in the former of which mental development seems to be more definitely affected while in the latter the mind is clear and capable and physical development is deficient.

Hypoplasia in children according to E. B. McCready of Pittsburgh, who is a close and intelligent student of this subject, properly may include the backward child ""who is retarded in his development by reason of some condition either inherent in the build himself, which can either be removed or counteracted, or who is subject to some physical defect of environmental condition, the removal of which will allow him to progress in a normal manner under favorable opportunities." (3)

From the standpoint of this author, with whom I am heartily in accord, the hypoplastic child is not necessarily a sufferer from an unchangeable developmental complex. The stimuli to growth and development have not been sufficiently strong and these necessary manifestations are at a standstill or below par. Fortunately this class constitutes a large proportion of the socalled "backward children" and from a clinical standpoint the prognosis has been radically changed for the better since the advent of scientific endocrinology and a better appreciation of the possibilities of substitution therapy.

The hypoplastic individual is suffering from an arrested development. All function is at half-speed or even slower and among the early symptoms enumerated by McCready (4) are: Delay in power of walking and talking, late closing of the fontanelles, irregular dentition, though progress in these re-

spects may be entirely normal and even more rapid than normal for the precocious child is often an hypoplastic one. Additional early signs are nocturnal enuresis, the so-called scaphoid scapula, a tendency to lymphatism with adenoids and hypertrophied tonsils, and pronounced malnutrition.

Leonard Williams (5) has brought together enough clinical and therapeutic evidence to establish the fact that enuresis in the hypoplastic child is largely a result of thyroid insufficiency, which is so commonly present, and the successful administration of thyroid extract in these cases tends to bear out this contention. Incidentally Williams believes that adenoids and enlarged tonsils represent a compensatory action of the body, tending to counterbalance the thyroid insufficiency.

Graves (6) finds the scaphoid scapula so common in these cases that in a report of 47 children who were behind in their grades, all were under size and showed various anomalics in development, 58 per cent. were mouth breathers, 17 per cent. were subject to enuresis and 85 per cent. showed the scaphoid scapula. Another fairly constant symptom, according to McCready. is the high-arched palate which is presumed to be produced by the yielding of the palatine bones owing to their relative deficiency in calcium. Enlarged tonsils and adenoids, while common enough, are more likely to occur in hypoplastic children and according to Noble (1) this pathological condition of cell hypoplasia explains the reason for a large group of debilitated women and also all the children who are not vigorous and who have adenoids and diseased tonsils and who become mouth breathers.

It is not possible within the limits of this brief communication to mention a tithe of the statements in the last ten or fifteen years regarding the endocrine basis of developmental disorders in children, but if the students of these "children requiring special attention" will look carefully for the functional accompaniments of thyroid insufficiency (7) they will be found in a large proportion of the cases.

Probably the next most important gland that deserves study in this class of cases is the thymus, for thymus enlargement or in older children the persistent thymus, is very commonly connected with disorders of this character, just as a premature atrophy or absence of the thymus also may be found. Hard and fast statements can not yet be made as the real function of this gland. Some deny its internal secretory powers and call it merely lymphoid tissue. Not all are unanimous about the relation of this gland, but from a clinical standpoint, I am certain that the thymus is involved in many cases of this character for I have personally demonstrated an enlarged thymus in a number of children that have come to me for diagnosis or treatment and following a fluoroscopic examination I have had these children irradiated and later on re-examination have discovered a considerable reduction in the thymic shadow which was accompanied by benefit to the symptom complex under treatment (though of course I admit that this procedure just mentioned was but a part of the treatment).

There is no question about the defectiveness of children suffering from the well-defined status thymico-lymphaticus, though mentality may be normal. In such cases an early diagnosis may be facilitiated by a differential blood count in which the lymphocytes will be found to be greatly increased (100 per cent. or more). There will be hyperplasia of various groups of lymph glands as well as the tonsils and spleen and the skin will have a pale, badly nourished appearance and occasionally there will be an associated mal-development of the genitalia.

Thymus hyperplasia in children is usually accompanied by the "hypoplastic state" referred to before. The increased celluar growth of the thymus and other lymph structures is modifying the chemistry of the body in such a way that the deficiencies of hypoplasia are permitted to show themselves. These individuals are of the flabby, semi-obese type and practically always have other evidences of developmental dystrophy. Occasionally in addition to the osseous changes already mentioned (high-arched palate scaphoid scapula) the bony development is modified seriously, the epiphyses are late in joining and rickets may be present. On the other hand, Bourneville has shown from autopsy findings that over 70 per cent. of mentally defective and epileptic children have no thymus at all. This may seem to be contradictory but it is none the less suggestive as it directs attention to the thymus as a regulator of the chemistry, and whether deficient or excessively active, it is a factor deserving of our study.

While it is granted that our knowledge of the thymus gland is none too definite as yet, we are safe in assuming it to be an important factor in defective children, and initiating a careful physical examination for the gland itself and a search for evidences of dysthymism. If this search is unremunerative it is a great advantage to me to have ruled out the likelihood of thymic involvement for not infrequently it is present and ignored altogether with obvious detriment to the success of the best of treatment.

Still another gland is prominently identified with developmental disorders in children. The hypophysis or pituitary has much to do with the chemical control of development and while it may not be so important as the thyroid it is more important than some have thought. Quite the most import-

ant recent step in the development of our knowledge of the ductless glands is the discovery by T. Brailsford Robertson of the University of California of the active principle of the pituitary gland proper, tethelin, and its growth-controlling function. (8) is entirely possible that in tethelin we may find a most useful means of stimulating deficient growth though to date the use of this principle has been largely limited to the laboratory. far I have used the desiccated anterior lobe of the pituitary in fourteen cases with advantage in enough to establish my confidence in this form of treatment. Suffice it to say that many deficiencies in children have a pronounced pituitary origin and it is a routine in my work to study all such children from a pituitary standpoint. Radiographs of the sella turcica are made, and quite often I have found obvious changes in the shape and size of the pituitary fossa; and while pituitary feeding is being practiced more frequently, too often I am finding that this has been done in cases coming to me for consultation, without any accurate reason therefor and naturally without good results. I have in mind case of developmental dystrophy that had been treated for many months first with thyroid and then with pituitary and then with both, without the slightest beneficial results. The case was none the less one in which gland feeding was in order, but this was not successful until given with reason and accompanied by such adjuvant procedures as needed to be carried out simultaneously. In other words, it is bad policy to treat symptoms instead of patients, for not infrequently such treatment is unsuccessful and the interest of physician and parent in this is lost when in reality it is the only hopeful thing.

Pituitary infantilism is very completely studied and illustrated by Cush.

ing and his monograph\* is the most comprehensive piece of literature on the subject extant.

The adrenals likewise may be involved and adrenal sensitiveness is not uncommon in defective children. Slight psychic or emotional stimuli make a very great impression on them. They fatigue easily and the cardiovascular tone is low. I have noted a number of times peculiar bluish mottling of the skin, especially of the lower parts of the body and a tendency to dermographia, which I have laid to some adrenal element in the pluriglandular disturbance. These circulatory-cutaneous manifestations may not be of great diagnostic significance per se, but they are of value as indicators of a prospective dyscrinism and a means of stimulating further study of the endocrine functions.

Already considerable emphasis has been laid upon the importance of pluriglandular dystrophies and I may say that I have never seen a defective child in which there was a pure monoglandular disorder, and I do not believe there ever has been such a The reasons for this have already been quite fully discussed elsewhere in my writings and the obvious therapeutic indication is to be sure that our treatment is comprehensive.

McCready\*\* in his work along this line has devised a combination of pared for him. This is now obtainable

glandular extracts which he had pre-\*The Pituitary Body and Its Disorders,

in trade under the name "Tabloid Mixed Glands" and to my mind this is a much more satisfactory treatment than the single extracts which we have been wont to use in the past, and it has the advantage of enabling one to stimulate the endocrine system as a whole rather than a part of it; and where necessary by adding additional amounts of such other extracts as may seem to be indicated, special homostimulation may be brought about.

It would not be proper to dismiss subject without considering a phase of it which is deserving of much more concerted study and action. Not a little concentrated attention has been directed at the huge task before the medical profession of preventing as far as possible the dire results of mental and physical defects and diminishing the extent of this most pitiful of all phases of social medicine.

Perhaps the most reasonable and practically interesting communication on this subject is the address by Sajous (9) in which he makes a plea for cooperation along a line which is altogether new. Sajous brings sufficient evidence to show that glandular insufficiencies of a minor character in mothers are likely to be impressed upon their unborn offspring and the obvious thing to do in cases of this character is to be sure that these insufficiencies are minimized at the time when this treatment will offer the greatest prospects of results. In other words, if a mother is suffering from thyroid insufficiency it is likely that her child will have leanings in the same direction and thyroid feeding is in order during pregnancy. I have personally discovered in scores of cases a very clear relation between ductless glandular disturbances in the mother and her offspring. In fact it is almost the rule to find that the woman with a goiter transmits a tendency to goiter to her daughter and when patients come for treatment the history will show

<sup>\*</sup>The Pituitary Body and Its Disorders, by Harvey Cushing. J. B. Lippincott Co., 1912, Philadelphia.

\*\*I think it is only proper to give much credit to Dr. McCready for the aggressive and intensive way in which he has studied what he chooses to call "pedology." He has unusual facilities in the Children's Courts at Pittsburgh and also his institution "Wildwood Hall" offers ideal facilities for the suitable care of children requiring special attention. The successful treatment of this class of cases involves not merely glandular feeding but intimate hygienic and dietetic control, special education and an ideal environment; and it is almost impossible environment; and it is almost impossible to secure these at home or in most insti-tutions in which such cases are handled by the State.

Thymus hyperplasia in children is usually accompanied by the "hypoplastic state", referred to before, The increased celluar growth of the thymus and other lymph structures is modifying the chemistry of the body in such a way that the deficiencies of hypoplasia are permitted to show themselves. These individuals are of the flabby, semi-obese type and practically always have other evidences of developmental dystrophy. Occasionally in addition to the osseous changes already mentioned (high-arched palate and scaphoid scapula) the bony development is modified seriously, the epiphyses are late in joining and rickets may be present. On the other hand, Bourneville has shown from autopsy findings that over 70 per cent. of mentally defective and epileptic children have no thymus at all. This may seem to be contradictory but it is none the less suggestive as it directs attention to the thymus as a regulator of the chemistry, and whether deficient or excessively active, it is a factor deserving of our study.

While it is granted that our knowledge of the thymus gland is none too definite as yet, we are safe in assuming it to be an important factor in defective children, and initiating a careful physical examination for the gland itself and a search for evidences of dysthymism. If this search is unremunerative it is a great advantage to me to have ruled out the likelihood of thymic involvement for not infrequently it is present and ignored altogether with obvious detriment to the success of the best of treatment.

Still another gland is prominently identified with developmental disorders in children. The hypophysis or pituitary has much to do with the chemical control of development and while it may not be so important as the thyroid it is more important than some have thought. Quite the most import-

ant recent step in the development of our knowledge of the ductless glands is the discovery by T. Brailsford Robertson of the University of California of the active principle of the pituitary gland proper, tethelin, and its growth-controlling function. (8) It is entirely possible that in tethelin we may find a most useful means of stimulating deficient growth though to date the use of this principle has been largely limited to the laboratory. far I have used the desiccated anterior lobe of the pituitary in fourteen cases with advantage in enough to establish my confidence in this form of treatment. Suffice it to say that many deficiencies in children have a pronounced pituitary origin and it is a routine in my work to study all such children from a pituitary standpoint. Radiographs of the sella turcica are made, and quite often I have found obvious changes in the shape and size of the pituitary fossa; and while pituitary feeding is being practiced more frequently, too often I am finding that this has been done in cases coming to me for consultation, without any accurate reason therefor and naturally without good results. I have in mind a case of developmental dystrophy that had been treated for many months first with thyroid and then with pituitary and then with both, without the slightest beneficial results. The case was none the less one in which gland feeding was in order, but this was not successful until given with reason and accompanied by such adjuvant procedures as needed to be carried out simultaneously. In other words, it is bad policy to treat symptoms instead of patients, for not infrequently such treatment is unsuccessful and the interest of physician and parent in this is lost when in reality it is the only hopeful thing.

Pituitary infantilism is very completely studied and illustrated by Cush.

ing and his monograph\* is the most comprehensive piece of literature on the subject extant.

The adrenals likewise may be involved and adrenal sensitiveness is not uncommon in defective children. Slight psychic or emotional stimuli make a very great impression on them. They fatigue easily and the cardiovascular tone is low. I have noted a number of times peculiar bluish mottling of the skin, especially of the ower parts of the body and a tendency to dermographia, which I have laid to some adrenal element in the pluriglandular disturbance. These circulacory-cutaneous manifestations may not pe of great diagnostic significance per se, but they are of value as indicators of a prospective dyscrinism and a neans of stimulating further study of the endocrine functions.

Already considerable emphasis has peen laid upon the importance of oluriglandular dystrophies and I may say that I have never seen a defective child in which there was a pure nonoglandular disorder, and I do not believe there ever has been such a ease. The reasons for this have aleady been quite fully discussed elsewhere in my writings and the obvious herapeutic indication is to be sure hat our treatment is comprehensive. McCready\*\* in his work along this ine has devised a combination of glandular extracts which he had prepared for him. This is now obtainable

in trade under the name "Tabloid Mixed Glands" and to my mind this is a much more satisfactory treatment than the single extracts which we have been wont to use in the past, and it has the advantage of enabling one to stimulate the endocrine system as a whole rather than a part of it; and where necessary by adding additional amounts of such other extracts as may seem to be indicated, special homostimulation may be brought about.

It would not be proper to dismiss the subject without considering a phase of it which is deserving of much more concerted study and action. Not a little concentrated attention has been directed at the huge task before the medical profession of preventing as far as possible the dire results of mental and physical defects and diminishing the extent of this most pitiful of all phases of social medicine.

Perhaps the most reasonable and practically interesting communication on this subject is the address by Sajous (9) in which he makes a plea for cooperation along a line which is altogether new. Sajous brings sufficient evidence to show that glandular insufficiencies of a minor character in mothers are likely to be impressed upon their unborn offspring and the obvious thing to do in cases of this character is to be sure that these insufficiencies are minimized at the time when this treatment will offer the greatest prospects of results. In other words, if a mother is suffering from thyroid insufficiency it is likely that her child will have leanings in the same direction and thyroid feeding is in order during pregnancy. I have personally discovered in scores of cases a very clear relation between ductless glandular disturbances in the mother and her offspring. In fact it is almost the rule to find that the woman with a goiter transmits a tendency to goiter to her daughter and when patients come for treatment the history will show

<sup>\*</sup>The Pituitary Body and Its Disorders, yy Harvey Cushing. J. B. Lippincott '00., 1912, Philadelphia. \*\*I think it is only proper to give much

<sup>\*\*</sup>I think it is only proper to give much redit to Dr. McCready for the aggresive and intensive way in which he has tudied what he chooses to call "pedology." He has unusual facilities in the Children's Courts at Pittsburgh and also is institution "Wildwood Hall" offers deal facilities for the suitable care of hildren requiring special attention. The uccessful treatment of this class of ases involves not merely glandular feeding but intimate hygienic and dietetic control, special education and an ideal myironment; and it is almost impossible to secure these at home or in most institutions in which such cases are handled by the State.

almost always a hereditary basis for troubles of this character.

I can do no better than to select a few weighty sentences from Doctor Sajous' address, that by reprinting them, a greater appreciation of this subject may be stimulated.

"Any disease capable of injuring the ductless glands sufficiently to inhibit their functional activity impairs correspondingly the development and functional activity of the brain, by reducing the supply of secretions this organ requires to carry on these physiological processes."

"The main underlying cause of defective mentality in both parent and offspring is inherited deficient activity of the ductless glands."

"We should start a campaign having in view the salvation of these unfortunate infants by supplying, through the itermediary of their defective mothers, and, after birth, through their food, the secretions they lack to complete their development."

"In the majority of functional cases of feeble-minded and backward children met in current practice, the predominating pathogenic factor is hypothyroidism, though deficiency of other internal secretions is also discernible in most instances."

"On the whole, the intimate relationship between the ductless glands and everything that concerns reproduction, the greater relative size of these organs in the product of conception, and the teachings of practical experience in organotherapy, all tend to indicate that whenever the father or mother is a mental defective, or both parents show any sign of deficient activity of one or more ductless glands, or are mental defectives, organotherapy should be instituted as soon as pregnancy is recognized."

"The mental and physical status of all pregnant women as regards the functional efficiency of their ductless glands, which may be determined by

the stigmata of deficiency of these organs, should invariably be established. If found deficient, organo-therapy should be used to protect them against renal disorders and convulsions through toxemia, and also their offspring against imperfect development and mental deficiency. ' '

In closing I feel to add that the foregoing statements are deserving of the closest attention, and that the principle so clearly enunciated applies to all deficients or defectives and not merely to those in which the mental element predominates.

#### REFERENCES.

REFERENCES.

1. Chas. P. Noble, Hereditary Hypoplasia in Man, Due to Degeneracy. Jour. A. M. A., Feb. 3, 1909.

2. E. Hertoghe, Thyroid Insufficiency. Practitioner (Lond.), Jan., 1915.

3. E. Bosworth McCready, The Care of the Exceptional Child. Arch. Pediatrics (N. Y.), June, 1911.

4. Ibid, Retarded Mental Development in Children, Internat. Clin. (Phila.), 1913, Vol. I.

5. Leonard Williams, Clinical Lecture before Medical Graduate College, London Polyclinic (Lond.), Jan., 1909.

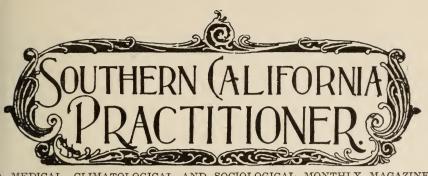
6. W. W. Graves, The Scaphoid Scapula, Medical Record (N. Y.), May 21, 1910.

7. Henry R. Harrower, The Inconspicuous, Everyday Forms of Thyroid Insufficiency. California State Journal of Medicine (San Francisco), May, 1916.

8. T. Brailsford Robertson, Recent Investigations of the Influence of the Anterior Lobe of the Pituitary Body, and on the Properties of the Growth-Controlling Constituent Tethelin. Endocrinology (Los Angeles), Jan., 1917.

9. Chas. E. deM. Sajous, Our Duty to Mental Defectives of the Present Generation. New York Med. Jour., April 1, 1916.

Mr. Norman R. Martin, who has for time been Superintendent County Charities, has been appointed Superintendent of the County Hospital, to succeed the late Dr. C. H. Whitman. This arrangement will not interfere with Mr. Martin's duties as head of the Charities Department, and the business affairs of the Hospital will be handled the same as they have since Dr. Whitman was granted a leave of absence, several weeks ago. Dr. J. Mark Lacey is in charge of the Medical Department of the Hospital.



A MEDICAL, CLIMATOLOGICAL AND SOCIOLOGICAL MONTHLY MAGAZINE.

This journal endeavors to mirror the progress of the profession of California and Arizona.

Established in 1886 by Walter Lindley, M.D., LL.D.
DR. GEORGE E. MALSBARY, Editor and Publisher.
Associate Editors,

Dr. Walter Lindley, Dr. W. W. Wakins, Dr. Ross Moore, Dr. George L. Cole, Dr. Cecil E. Reynolds, Dr. William A. Edwards, Dr. Andrew W. Morton, Dr. H. D'Arcy Power, Dr. B. J. O'Neill, Dr. Otto G. Wicherski, Dr. Charles H. Whitman, Dr. Edward T. Dillon, Dr. C. G. Stivers, Dr. Boardman Reed, Dr. W. H. Dudley, Dr. J. M. Mathews, Dr. A. J. Cook.

Address all communications and manuscripts to

EDITOR SOUTHERN CALIFORNIA PRACTITIONER.

Subscription Price, per annum, \$2.00. 1414 South Hope Street, Los Angeles, Cal.

### EDITORIAL

# THE BIT OUR PROFESSION MUST DO.

Here is the situation that confronts us. We must provide 20,000 physicians for our great military force that is now in the course of organization. At the present time there are less than 500 physicians in the regular Medical Army Corps, about 2,500 in the Medical Reserve Corps and about 800 in the Militia, or a total of about 3,800 physicians when we must have 20,000. Commissions are accorded in the Medical Reserve Corps on the basis of the ranks of First Lietutenant, Captain and Major, with the respective pay of \$2,000.00, \$2,400.00 and \$3,000.00 a year. No physician is commissioned lower than a First Lieutenant.

We believe that you will do your part in helping to meet our great national crisis.

#### OSLERISM.

The sending of Elihu Root, who is, in our estimation, America's greatest citizen, at the age of 72 years, as

special Ambassador to Russia, shows that the usefulness of man is not limited in the manner suggested by Osler. The lives of such men as Root and Choate, emphasize the fact.

We keep our faculties fresh by exercise. Disuse brings degeneration, introspection, and later despair. It is work only which animates, rejuvenates, and inspires. Quincy asked John Adams how he managed to keep his faculties entire to ninety years. 'By constantly employing them,' he replied. 'The mind of an old man is like an old horse; if you would get any work out of it, you must work it all the time.' Humboldt at seventy-five worked like a plowman. He completed the third edition of his work at the age of eighty, the period at which Cato set himself to studying Greek. Caroline Herschel prosecuted her studies in astronomy at the age of eighty-four, while Hannah More at this period was such a cultivated woman as to attract to her house visitors by the hundred every week.

ice in the United States Army and Navy. There were 54 examined. Those who passed may enter the Army as First Lieutenants.

The engagement of Dr. Egbert Earl Moody and Miss Elsie Olive Behymer has been announced by Mr. and Mrs. L. E. Behymer, parents of the young lady. The contracting parties are both natives of California. Miss Behymer graduated from the University Southern California and then spent a year in study in Paris, London and Dr. Moody graduated last month from the Medical Department of the University of Southern California, when he won, among other honors, the much coveted James H. Seymour gold medal, for the highest average in senior surgery. He has recently been elected to an interneship in the California Hospital.

The members of the Surgical Staff of the Los Angeles Red Cross Naval Base Hospital, recently passed their examinations and are now ready for service. Dr. Rea Smith, director of the Corps, states that the entire equipment costing \$25,000, had been donated by citizens of Los Angeles.

The staff includes eleven physicians and surgeons, with as many alternates to take their places after a year's service, according to the original plans. Whether this change will be made if the organization is sent to Europe has not been announced.

Members of the staff are: Drs. Rea Smith, director; Guy Cochran, alternate director; Harry W. Voorhees, junior surgeon; Phil Boller, alternate junior surgeon; Louis Josephs, assistant surgeon; Thomas R. McNab. alternate assistant surgeon; W. W. Richardson, orthopedist; Lewis Norton, alternate orthopedist; Frank W. Miller, surgeon for eye, ear, nose and throat; D. P. Fredericks, alternate; Dudley Fulton, assistant director medical sec-

tion; Donald J. Frick, alternate; J. Rea Cowan, junior medical; Bertnard Smith, alternate; Ross Moore, neurologist and alienist; Thomas J. Orbison, alternate; A. T. Charlton, assistant director laboratory section; Egerton Crispin, alternate; John W. Crossan, bacteriology and X-ray specialist; W. E. Sibley, dental officer; J. F. Cook, alternate.

Dr. P. G. Cotter, age 60 years, died at his home, No. 729 Burlington Avenue, on the afternoon of June 16, 1917. Dr. Cotter came to Los Angeles fourteen years ago, after completing his studies in Rome, Vienna and Edinburgh. He had a stroke of paralysis about two years ago, and since that time has been quite an invalid. His funeral services were at the Cathedral Chapel, and conducted by Bishop J. S. Glass of Salt Lake City, who was his close personal friend. Twenty-five other priests participated in the High Mass. Dr. Cotter was greatly beloved in this city and filled a prominent place in the profession as one of the few general practitioners. He was a delightful, kindly man, whom it was always a pleasure to meet. His widow has the deep sympathy of the medical profession.

The death of Dr. Chas. H. Whitman, at his official rseidence, at the Los Angeles County Hospital on Thursday, June 14, removed from our midst one of the most forceful characters that the medical profession of California ever possessed. Dr. Whitman was born in New York, November 26, 1854. He was practicing medicine in San Francisco at the time of the great earthquake and fire. He then moved to Los Angeles. In 1909 he was appointed Superintendent of the Los Angeles County Hospital. He was a man of broad and comprehensive vision and developed the County Hospital into the great and noble institution that it now is. He was President of the Los Angeles County Medical Society and was held in the highest esteem by his fellow practitioners. His funeral services were largely attended by physicians and other friends, who listened to an eloquent address by Rev. Chas. E. Locke.

Dr. William Halliday Fraser, royal physician emeritus of the Order of Scottish Clans, died June 11, at the Clara Barton Hospital. Dr. Fraser was seventy-eight years of age. He is survived by a wife and nine children. The deceased was one of the most widely known physicians in America and Scotland. He graduated from the McGill

Medical College at Montreal in 1867 with the degree of medical doctor and master surgeon. In the same year he took the postgraduate course at Edinburgh and started his practice in Liverpool, Nova Scotia, where he resided from 1868 to 1879. In Los Angeles he married Miss Lydia M. Waterman, who survives him. From the year 1870 to 1871 he confined his private practice at Chicago and changed to La Salle, Illinois, in 1871 and stayed there until 1913. Dr. Fraser became a royal physician of the Scottish Clans in 1892. He held this position until 1910 when he was honored with the degree of emeritus.

### MISCELLANEOUS

### <sup>1</sup>COMMERCIALIZED PROSTITUTION IN NEW YORK CITY.

<sup>2</sup>Parlor Houses.

Conditions in 1912:

In 1912, 142 parlor houses were in operation in Manhattan, with 1686 inmates. The majority of these inmates lived in the houses and were under the direct control of the men owners and madams. Some lived with their pimps and came to the houses at regular hours, remaining until closing time.

Conditions November 1, 1915:

On November 1, 1915, only 23 houses were in active operation. In ten of these resorts, 21 regular inmates were counted. In five of the houses, 36 women were "on call." In six houses, no inmates were seen, but it was estimated that they contained sixteen women. That is, with the term "parlor house" construed even more broadly than was the case during the previous investigation, the number was cut down from 142 to 23; the inmates, from 1686 to hardly more than 50.

The 23 houses above mentioned were located in the following police precincts: one in the 14th; four in the

18th; eleven in the 22d; two in the 23d; three in the 26th; one in the 28th; and one in the 31st.

Conditions November 1, 1916:

Not one of the 23 houses reported in 1915 is running today. Police activity has suppressed them all, together with 56 others which in the course of the year led a brief, furtive existence. We were able to locate 22 houses in operation as of November 1, 1916, although it is probable that by the time this report reaches the public, some of them, at least, will have been closed. Eight of these 22 houses were "call houses." Twelve of the houses had an average of from one to two inmates, and in the remaining two nothing was learned as to the number of inmates.

The 22 houses operating on this date were in the following police precincts: one in the 16th; three in the 18th; nine in the 22d; one in the 23d; seven in the 26th; and one in the 29th.

The change in the method of operating these houses is equally significant. In the majority of them, the inmates remain in their rooms, dressed in respectable attire, pretending to be legitimate boarders. In fact, these resorts

are to all appearances furnished-room houses.

The contrast between the volume of business transacted by these resorts in 1912 and at present is very striking. In 1912, the houses were in active operation, with a full quota of inmates. Today the few houses with one or two inmates each, are, according to their own testimony, hardly making ex-They are merely "holding on," speculating as to how long this condition will continue, and eagerly watching for a termination of police activity. "We have weathered all reforms," they say, "from the Lexow Investigation and the Low administration down to the one now in power, and the reformers always got tired and quit. But this one still keeps up after three vears. We can't understand it."

1. Report of Bureau of Social Hygiene.
2. A parlor house or brothel is a building used exclusively for the business of prostitution. It derives its name from the fact that its inmates gather in the parlor to receive their guests. There is, however, an exception to this definition, inasmuch as some parlor houses at the present time are conducted as furnishedroom houses—that is, the madam rents certain rooms in her house to respectable persons, as a subterfuge. Her inmates are designated as roomers, and customers are shown directly to these rooms, rather than to the parlor. Again, some of these so-called parlor houses do not harbor inmates on the premises as formerly, but they are called to the houses by telephone when needed. Thus, their proper classification would be "call houses." These "call houses" are included under parlor houses because they are private dwellings used more or less for the business of prostitution.

# SAN DIEGO CITY CIVIL SERVICE COMMISSION.

A Civil Service examination will be held as indicated below, for the purpose of obtaining a list of persons eligible for appointment in the city service. Applications must be made on blank forms, which may be obtained at Room No. 8, City Hall, and should be filed with the Commission at least THREE (3) days prior to the date of examination. The applications must be sworn to at the office of the Civil Serv-

ice Commission, or before a Notary Public. No charge is made for this service at the office of the Commission.

All applicants must be not less than twenty-one (21) years of age, citizens of the United States and bona fide residents of the State of California at the time of the examination.

Examination No. 67 for Assistant Bacteriologist (Department of Public Health) will be held Thursday, August 9, 1917, at 8:30 A.M., Room 8, City Hall.

SALARY: One Hundred Twenty-five Dollars (\$125.00) per month.

REQUIREMENTS: Full time will be required. Applicants must have had experience in food and water chemistry; routine bacteriological examination; milk and water bacteriogical examinations; preparation of culture media, and preparation and technique of stains and stock solutions. It is desirable but not necessary that candidates be medical licentiates of the State of California.

NOTE: Applicants for this examination should send for application blanks at as early a date as possible in order that arrangements may be made for applicants who are unable to be in San Diego on the date set, to take the examination at the office of the nearest Civil Service Commission, at the same time it is being held in San Diego.

Civil Service Commission of the City of San Diego.

By Joseph H. O'BRIEN, Chief Examiner.

E. M. BURBECK, President.

# WHO DARES NOW PRAISE VIBURNUM?

I presume that now, after the long trial in Chicago which cost the Association a pretty penny, to dare say a good word for viburnum prunifolium or viburnum opulus or carduus benedictus would be equivalent to high treason, to lèse-majesté. Well, I know nothing about carduus, and have never used it. But I do know something about viburnum, having prescribed it hundreds of times, and I will say that viburnum is an excellent drug and a good preparation of it renders excellent service in dysmenorrhea and various circulatory disturbances of the endometrium and ovaries. Yes, in spite of what narrow theorists may say, I shall continue to prescribe it, and advise others to do likewise.—The Critic and Guide.

#### BREAD IN THE HOME.

# Government Specialists Test Its Value and the Best Way of Preparing It.

If home-baked bread were uniformly well made it would be used more extensively than at present in place of more expensive foods, say specialists in the U.S. Department of Agriculture, and this would be a distinct economy. From the standpoint of nutrition it makes very little difference whether breadstuffs are served in the form of bread or in the form of breakfast cereals, side dishes with meat, or desserts. A man engaged in moderate muscular work can profitably consume about 34 of a pound a day of breadstuffs in any one of these forms. This quantity is the equivalent of one pound of baked bread. As a matter of fact, however, it is not probable that in the average family this quantity is consumed and the deficiency is made up by the use of more expensive substances. Of course, bread alone is not sufficient for the maintenance of health. but from both an economical and a hygienic point of view should be used more extensively than it usually is.

In a new publication of the Department, Farmers' Bulletin 807, detailed directions for the making of bread in the home are given, together with a number of convenient recipes for home-

made biscuit, rolls and bread in which rice or potatoes are used with flour. The bulletin also gives a score card by means of which it is suggested the housewife can estimate the merit of her product.

#### THE MAKING OF AMPOULES.

An illuminating article on the manufacture of glaseptic ampoules of sterilized solutions, as conducted in the laboratories of Parke, Davis & Co., appears in a recent issue of Therapeutic Notes. It is noteworthy because of the emphasis placed upon the careful methods which are essential in the production of both solution and container.

"First of all," says the Notes, "the greatest care is taken in the selection of the glass from which the ampoules are made. It is of the first quality, and must be free from alkali in order to obviate any possibility of contamination or chemical action on the solution. This is vital, for it is imperative that the purity and stability of the contents of the ampolue be assured.

"The medicaments used in preparing solutions are treated with the most suitable solvents-e. g., oils, distilled water, or physiologic salt solutionand the solutions are invariably adjusted to a fixed standard of strength; that is, each contains a specific amount of medicament to a given volume, thus insuring accuracy of dose. The solutions are subjected to the process of sterilization, either by heat applied in an autoclave, at intervals, for four or five days, or by passage through a Berkefeld or Pasteur porcelain filter. They are then passed into sterilized bottles, and samples are submitted to the biological department for a series of sterility tests that extend over a period of five days.

"The ampoule containers, cleansed and sterilized, are filled with the ster-

ilized and tested solutions by machinery. The neck of each ampoule is hermetically sealed in a gas flame, and ampoules and contents are again subjected to the sterilization process, this time by the careful application of heat, care being taken to adjust the temperature of the apparatus to such a degree that the medicament will not suffer injury. The hermetically sealed container effectually protects the solution from bacterial contamination and oxidation, while the actinic effect of light is prevented by enclosure of each ampoule in an impervious cardboard carton."

As indicative of the trend in hypodermatic medication it may be noted that more than sixty sterilized soiu; tions are now sudplied by Parke, Davis & Co., in glaseptic ampoules. Conven- A private home, with experienced nurses, ience, asepsis, stability, accuracy ofdose-solutions in amountes appeal to modern practitioners on these grounds.

"It's a Condition that Confronts Us, Not a Theory: ''-These were the words of a celebrated statesman, and they apply with particular force in treating the many conditions presented daily to the physicians.

Theory is most admirable where it works out in practice, but where the practical is subjugated to the theoretical, results are frequently disappointing. When confronted with a case of dysmenorrhea, is it not well to at least try a remedy like Hayden's Viburnum Compound, which for years has enjoyed the confidence of some of the best men in the profession? All Dysmenorrheal conditions are not amenable to internal treatment, but it is within the intelligence of the attending physician to differentiate and act accordingly. Menorrhagia, Rigid Os, Threatened Abortion, and other Gynecological and Obstetrical conditions have responded most satisfactorily to the administration of H. V. C. where indicated. If

given a trial, the original Hayden's Viburnum Compound administered in hot water, teaspoonful doses, will enjoy and retain your confidence. We have been using it regularly for more than thirty years with the most satisfactory results. If confidence is lacking to the extent of giving it a trial, consider that Marion Sims found H. V. C. a most serviceable and satisfactory remedy and so referred to it in his writings.

Formula, literature, and a sufficient supply for clinical demonstrations will be sent on request to the New York Pharmaceutical Co., Bedford Springs, Begiord, Mass.

Home Phone 31156. Sunset East 333.

### "THE ROSENA REST RETREAT"

for the care and cure of nervous and mental patients. A delightful, permanent home for chronic cases.

Address: THE ROSENA REST RETREAT,

2814 Downey Ave. (now N. Broadway), Los Angeles, Cal.

References: Dr. H. G. Brainerd, Exchange Bldg., Third and Hill, Los Angeles, or any of the Leading Hospitals.

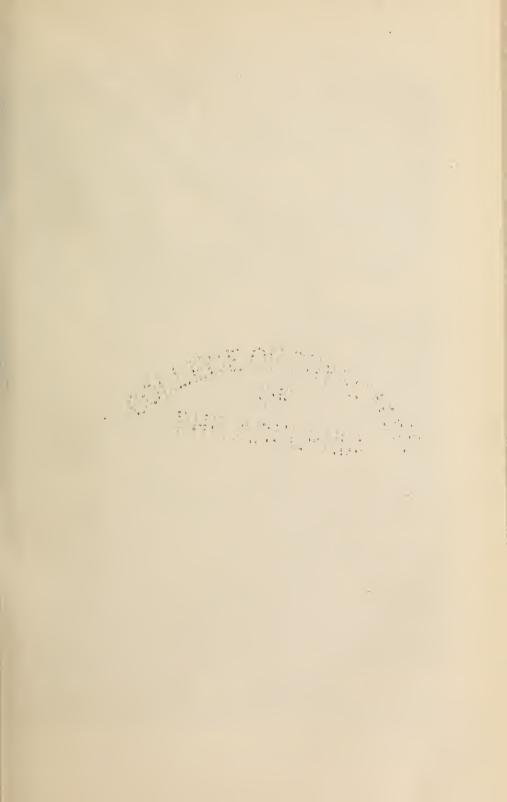


### RADIUM SULPHUR SPRINGS It Sparkles and Foams Like Champagne

Hot Baths and Treatments cure Rheumatism, Sciatica. Neuritis, Paralysis, Locomotor Ataxia, Poor Circulation. Heart, Stomach, Liver, Kidney, Diabetes, Bright's, Blood and Nervous Diseases, Female Troubles. Water delivered. Send for Booklet. vice free.

Melrose Ave. Cars Direct to Springs, Los Angeles

# Southern California PRACTITIONER \$2.00 PER YEAR 500 Auditorium Bldg. Los Angeles





(In the Oval)
Dr. J. Rea Cowen, Lieutenant-Commander in the

GUESTS OF HONOR—California Hospital Internes' Luncheon. Left to right, sitting: Lieutenants Josephs and Steinhere. Major Dacker Lieutenant Rather Laft to winth stein-



Vol. XXXII.

LOS ANGELES, AUGUST, 1917

No. 8

#### Editor, DR. GEO. E. MALSBARY.

Associate Editors,

Dr. Walter Lindley, Dr. W. W. Watkins, Dr. Ross Moore, Dr. George L. Cole,
Dr. Cecil E. Reynolds, Dr. William A. Edwards, Dr. Andrew W. Morton,
Dr. H. D'Arcy Power, Dr. B. J. O'Neill, Dr. Otto G. Wicherski,
Dr. Charles H. Whitman, Dr. Edward T. Dillon, Dr. C. G.
Stivers, Dr. Boardman Reed, Dr. W. H. Dudley,
Dr. J. M. Mathews, Dr. A. J. Cook.

## ANATOMY OF THE TONSIL.

BY C. G. STIVERS, W.E., LOS ANGELES.

Tonsils have 10 to 15 crypts, lined with squamous epithelium, which is continuous with that of the throat. Drainage from the tonsils into the throat is poor at best for the reason that the crypts branch and intercommunicate in the depths of the tonsil. In submerged tonsils some crypts are entirely covered over. No afferent lymphatics have been found in the tonsil, although experiments would show their presence. Lexer injected inert coloring pigment into the turbinates and later found it in the tonsil. Henki did the same in the gums.

#### Tonsil and Adenoid in Focal Infection.

Physiology—Some points in the physiology of the tonsil have been definitely settled, judgment on others is so uniform as almost to force conviction and some remain to be solved. The tonsils stand out prominently as constituting the first line of defense against microbic invasion—this barrier action is a most important one and the tonsils are arranged like sentinels to guard the most vital orifices of the human organism, a function most clearly demonstrated by Bizzozero, Ruffer, Ribbert

and others. Tonsils render a protective service by, making innocueus all, sorts of possibly infective material from the month, tecth, gums etc.-filtering out from the lymph stream such things, as particles of dust, cells from malignent tumors, dead or disintegrating cells, red blood corpuscles, bacteria etc., they enmesh such infectious material in the trabeculae of the tonsil where they undergo digestion or disintegration through the action of the phagocytes and ferments-the internal secretion of the tonsil and the filtered lymph stream flows on into the blood channels rendered innocuous. This important physiological function has been attributed to the tonsil by Delafield, Pruden and others. Stöhr has demonstrated that the tonsils are actually traversed by enormous number of leucocytes which migrate toward the oral cavity actually demonstrating the passage of leucocytes through the tonsillar epithelium into the buccal cavity which is (often) a medium for various microorganisms. This is called Stöhr's phenomenon. Metchnikoff found that particles of mucous removed from the

surface of the tonsil of a person in good health always contained numerous leucocytes especially small phagocytes filled with germs of all sorts. Philip Stöhr states that the leucocytes that wander through the epithelium of the tonsil are so numerous that they may be regarded as the fertile source of the salivary corpuscle. Von Chiari agrees and thinks the tonsils serve for the purpose of the formation leucocytes. Brieger has proved that the lymphocytes in the tonsils though devoid of ameboid movement enter the epithelium of their own accord and he has demonstrated their presence in lesser or greater degree in the epithelium of the tonsils. The vehicle which carries these is the lymphatic juice, reaching the surface through the finest canals. In addition to the specific. action of the phagocytes, the current of lymph per se, militates against the entrance of germs. Harrison Allen, Kayser: Pluder, Schoenemann. Geo. B .: Wood, Ashby and others state that the . tonsils from lyng hocytes in the germmating follicles. Piersol found that the epithelium covering the folds and depressions of the tonsillar surface is completely infiltrated with lymphoid cells, great numbers of which escape into the oral cavity to become the Salivary Corpuscles of which the tonsils are the most important source. much for the protective function of the tonsil-now for Defense against infections.

It has been conclusively proved that the tonsils, per se, actually antagonize the entrance to their interior of infectious germs. Hodenpyl conducted a careful series of experiments dealing with the phenomena of absorption at level of the tonsils and found that the epithelium prevented absorption, which latter became possible only when the epithelium was destroyed, or when the substances employed were introduced under the epithelial bed, and that even

under these conditions, it was extremely slow.

Clinically, we know that infectious germs, especially streptococci, are commonly found in the tonsillar crypts of healthy individuals, and that autoinfection is probably essential to induce follicular tonsilitis. Wright also 1 adds the significant comment that it is a highly interesting sequence of events, which takes place between the time the micro-organism floats on food or in the air into the tonsillar crypts and the time it reaches the deep lymphatics which drain the tonsilwhich he regards as a biologic process of a physiochemical nature, affecting the surface tension of the colloids, of which the cells and bacteria are composed.

Escat believes that the faucial tonsils have not for their only functions those above enumerated, but that they also possess a physiologic and biologic function, due to an internal secretion. With Allen, he agrees that the tonsils secrete a principal, the exact nature of which it has been difficult to determine, but which may be useful in the growth of the individual, and probably to the growth of the skeleton. Masini believes also that the tonsils are the seat of an internal secretion, somewhat similar to that of the suprarenal gland, and he succeeded in producing an increase in the arterial pressure by injecting many animals with an extract of tonsils. E. L. Shurley subscribes to the presence of this internal secretion. Leto discovered fuchsinophil cells in the human tonsils, similar to those which Schridde found in the thymus gland. He states that their origin is not known, but they may develop from the perivascular tissue, and in his opinion, they have a secretive function.

Frank E. Miller emphasizes the importance of the value of the tonsils as a lubricant. The frequency with which atrophic pharyngitis follows tonsillectomy adds clinical evidence rela-

tive to the necessity of this function, and John H. Johnson further endorses this point of view.

That the tonsils possess important mechanical, acoustic and phonetic functions very few will deny. Their consistence, shape size and presence or absence give structual variation to the resonance cavities, and create as well as determine differences in individual timbres of the voice. They play an important role in tone formation, and the excellent work of Faulkner along this line is invaluable.

Frank Billings in his Lane lectures for 1916 says: "The faucial tonsils are frequently infected through contaminated air, infected food, especially milk and by direct contact with infected individuals. Many children have large tonsils and over-growth of other lymphoid structures of the Pharvnx which make good soil for bacterial growth. Hyper tonsils and adenoid overgrowth in the naso-pharynx interfere with respiration and result in deformities of bones of face, and thorax. Obstruction of the upper air passage prevents proper drainage for the nasal cavities and accessory sinuses and leads to infection of middle ear, the sinuses of the head and the mucous membrane covering the turbinate bodies. Infected tonsils and adenoids may yield cultures of strep. mucosus, viridans, hemolysans micrococcus-catarebalis, pneumoc, baccapsulatis, terins, mucous bac, diphtheria and pseudo diphtheria and other pathogenic micro-organisms. Tonsils and surrounding lymph tissues may be a focus of tuberculosis from which lymph nodes of neck mediastinum may be infected. Smith and Barrett found endameba buccalis in the tonsils of 5 out of 17 patients. The presence of endameba in the tonsils would probably favor deep pyogenic infection.

What about the susceptibility to systemic and local diseases from the tonsil infection—?

The high percentage of tonsil infection is known, but the majority both young and old do not develop acute systemic diseases therefrom. A majority of children suffer from chronic infections of the tonsils and nasopharynx lymphoid tissue with occasional acute exacerbations, while the incidence of acute Rheumatic fever and endocarditis are unquestionably the result of focal infection of the mouth and throat.

The presence of infected tonsils is an ever present source of systemic infection which will be kept in obeyance by the vital resistance until it is reduced by physical and mental exhaustion starvation exposure to cold, alcoholic dissipation and exhausting general diseases, when the germs will gain an entrance to some spot of lowered resistance. Latent pathogenic bacteria always found in the tonsil acquire with the further strain on the system, augmented specific pathogenicity.

Digby asserts that by a process of continual autovaccination, the tonsils (in common with the solitary follicles of the intestine, Pever's patches and the vermiform appendix) protect the body against chance infection. Chemotaxis, all bacteria in the vicinity are attracted through the overlying into the lymph-nodule. epithelium This bacterial attack, invited into the region most favorable to the defensive mechanisms of the body, is nearly always repulsed; lymphocytosis takes place and a great excess of specific bacteriolysins and antitoxins are also produced, which enter the general system and combat the attack at a more vulnerable point. Thus, immunity against disease is acquired without the individual having apparently had the disease. The same theory is advanced by Packard, who holds that the microorganisms of acute inflammatory rheumatism are streptococci weakened through this action of the tonsils. and that otherwise we would observe

septic diseases oftener. Mackenzie also endorses the existence of this function.

The quartet comprising tonsilitis, rheumatic fever, endocarditis and chorea is almost classic. In addition, competent observers have considered the tonsils as a focus from which may be disseminated tuberculosis, diphtheria, empyema of the nasal sinuses, septic joints gall-bladder disease, appendicitis, gastrie ulcer, urethritis, etc.

# Diagnosis of the Location of the Focus.

Acute rheumatic fever, endocarditis, chorea, myositis, acute nephritis, peptic ulcer, appendicitis and chronic deforming arthritis for example are usually due to a focus in the head, and generally in the form of Alveolar abscesses, acute or chronic tonsilitis and sinusitis. It remains for the dental surgeon to eliminate the teeth and the focus remains in the field of the ear, nose and throat surgery.

The discovery of similarity of the pathogenic organism in cultural characteristics in the focus of infection and in the infected tissues and the production of a similar infectious process in the inoculated animal from the tissues of which the infectious bacteria afterward recovered, constitute reasonable proof of the etiologic relation of the focus of infection to the existing systemic infection. such successful clinical and laboratory studies of this kind have been made with patients suffering with acute rheumatic fever, sub-acute or chronic infections, endocarditis, chronic infections, arthritis, appendicitis, peptic ulcer, cholecystitis, glomerulo-nephritis and other diseases.

Dr. F. Theison reports 6 cases of acute Thyroiditis following tonsilitis, (Albany Medical Journal 1913).

One man will find causation of all human ills in the tonsils, another in and around the teeth, another in some other place. No doubt there is trouble in each of these places and the interesting thing about it is that on the removal of either one of these troubles the patient recovers and the other points clear up. This is explained as follows. The patient could combat 1 infection but 2 or 3 is too much for him and he succumbs. On the removal of one source of infection all resistance can be used on the other foci—and the infection overwhelmed.

Wright, Goodale and others have come to the conclusion that "Bacteria attacking the healthy tonsil do not permeate the epithelium." The destruction of bacteria occurs through a biochemical action, the cells (perhaps) throwing out an antagonistic ferment, which overcomes the germs and if the tone of the epithelium is normal there is as Ballinger puts it, an equilibrium between immunity and infection: when the cellular tonas is impaired the equilibrium between immunity and infection occurs.

In George L. Richards' collective investigation of the tonsil operation in 1909 he received 117 personal reports from leading nose and throat surgeons positively corroborating the evidence that there is a direct relation between tonsil infection and cervical adenitis as evidenced by the cessation of the adenitis after the removal of the tonsils, and only 5 men reported they did not know any relation between the two. It would seem proved that tonsil infection may act as a focus of infection for the lymphatics of the neck, and probably of the retro-bronchial glands as well.

# Connection Between the Tonsil and Tuberculosis.

Fifty-seven specialists had no knowledge and 39 had, of any connection between tuberculosis and the tonsil infections.

Hurd reported 7 cases out of 9 in which the clinical diagnosis of tubercular tonsilitis was made mainly from the condition of the cervical glands, and in which Jonathan Wright found

evidences of tubercle bacilli in the tonsils in one case out of 10 in which the clinical diagnosis was simple chronic inflammation of the tonsil. Dr. Wright found tuberculosis evident in the tonsil, he thinks the tubercular cervical glands at the angle of the jaw are almost always secondary to primary tuberculosis of the tonsil.

Lermovez regards chronic lesions of the tonsils as an open door to tuberculosis.

Thompson advised the removal of diseased tonsils in an adult woman which was refused. She returned two years later for the removal of the tonsils and a large mass of glands in the neck. Recovery took place. There was no tuberculosis anwhere else in the body.

Shurly reports on the other hand that according to his observations there are few cases of tonsillar tuberculosis.

Richards himself, is convinced that a causual relation exists between tonsil infection and tuberculosis.

What is the appearance of the tonsil that may be a focus of infection?

The acutely inflamed tonsil that is, in which the crypts are full of dead cells, bacteria, blood and dust particles. the gross appearance of which is familiar to everyone, may be the focus from which may arise acute and chronic middle ear infection, sinus infection, Mastoiditis, Bronchitis and Pneumonia, peptic ulcer, Endo-Myo and Pericarditis, Chalecystitis, Iridocyclitis, Thyroiditis and Rheumatic fever and perhaps other diseases.

The chronically inflamed tonsil with pouting crypts with or without visible soft or cheesy or hard excretion, may lead to all of the above and in addition, to Nephritis and Interstitial hepatitis.

No man can insolate the source of infection. Focal infection is the place for teamwork.

Treatment of a Focus Found in Tonsil or Adenoid.

This is unquestionably most quickly and completely accomplished by complete surgical removal. The operations tonsillectomy and adenectomy are the ones favored by the most skillful operators. In singers the question must be carefully put up to the patient, the dangers outlined and the decision left to him or her. There is no question that many throats are left in very bad condition for singing after unskillful operations in which pillars are cut uvulas amputated and space between anterior and posterior pillars left full of scar tissue. This latter condition is not usually the fault of the surgeon, but depends mainly on the fact that for a long time there has been deep cryptic inflammation with the formation of much scar tissue and adhesion to the muscles by the capsule and when cut this tissue will surely regenerate.

#### BIBLIOGRAPHY.

Poynton, F. J., and Paine, A. Etiology of Rheumatic Fever. The Lancet, 1900, II-861.

Smith, Allen J., Middleton, W. S., and Bassett, M. F. "Tonsils as a Habitat of Oral Endamebas." Jour. A. M. A., 1914,

43, 1746.

Hammond, "The Role of the Nose in Etiology Throat and Accessory Sinuses in Etiology of Chronic Infectious Arthritis." Journal A. M. A., LXV, 1091, No. 13. Richards, G. L., Annals of Otology, Rhinology and Laryngology, Dec., 1909.

Auditorium Building.

The late Dr. P. G. Carter left an estate valued at \$35,000. To his fouryear-old boy, Donald, he leaves \$500 to be given him if he does not drink or smoke before he is 21 years old. He left the St. Vincent de Paul's Society \$500. He leaves his brother, the Rev. R. H. Carter, \$500 with instructions to say mass for the dead. The widow receives the balance of the estate to hold if she does not marry again. If she marries she is to receive but one-fourth of the estate; \$2500 is set aside in a Los Angeles bank to be used to educate the son in a Catholic institution.



A MEDICAL, CLIMATOLOGICAL AND SOCIOLOGICAL MONTHLY MAGAZINE. This journal endeavors to mirror the progress of the profession of California and Arizona.

Established in 1886 by Walter Lindley, M.D., LL.D. DR. GEORGE E. MALSBARY, Editor and Publisher.

Associate Editors.

Dr. Walter Lindley, Dr. W. W. Watkins, Dr. Ross Moore, Dr. George L. Cole, Dr. Cecil E. Reynolds, Dr. William A. Edwards, Dr. Andrew W. Morton, Dr. H. D'Arcy Power, Dr. B. J. O'Neill, Dr. Otto G. Wicherski, Dr. Charles H. Whitman, Dr. Edward T. Dillon, Dr. C. G. Stivers, Dr. Boardman Reed, Dr. W. H. Dudley, Dr. J. M. Mathews, Dr. A. J. Cook.

Address all communications and manuscripts to

EDITOR SOUTHERN CALIFORNIA PRACTITIONER.

Subscription Price, per annum, \$2.00.

1414 South Hope Street, Los Angeles, Cal.

### EDITORIAL.

#### CARREL-DAKIN SOLUTION.

The original Dakin solution consisted of 200 gm. of chlorinated lime in 10 liters of water containing 140 gm. anhydrous sodium carbonate. This was thoroughly shaken and let rest for half an hour to permit separation and settling of the precipitated calcium carbonate. The supernatant liquid was siphoned off and filtered through cotton. The solution was then neutralized to phenolphthalein by the addition of 25 to 40 gm. of boric acid in solution. The solution was described in a paper by Dr. H. D. Dakin, formerly director of the Herter Laboratories of New York, prepared while serving as bacteriologist in France and read before the Academy of Sciences at Paris. It was published in the society proceedings, August 5, 1915, in the Presse medicale.

Dakin believed that the hypochlorites reacted with proteins, forming chloramins that are antiseptic. Therefore he and others proposed the use of para-toluene-sulpho-chloramid, which is now marketed under a trade name.

The following is given by Carrel in a communication to The Journal, for the preparation of the Dakin solution:\* "Dakin's solution is a solution of sodium hypochlorits for surgical use, the characteristics of which, established after numerous tests and a long practical experience, are as follows:

(a) Complete Absence of Caustic Alkali. The absolute necessity for employing in the treatment of wounds a

<sup>\*</sup>Daufresne is one of the workers at the hospital of the Rockefeller Institute at Compiegne, in charge of Dr. Carrel. A paper by him, giving the technic he follows in the preparation of the Davin solution, was published in the Presse medicale, October 23, 1916.

solution free from alkali hydroxid excludes the commercial Javel water,† Labarraque's solution, and all the solutions prepared by any other procedure than the following:

-

(b) Concentration. The concentration of sodium hypochlorite must be exactly between 0.45 and 0.50 per cent. Below 0.45 per cent of hypochlorite the solution is not sufficiently active; above 0.50 per cent it becomes irritating.

Chemicals Required for the Prepara-Three chemical substances are indispensable Dakin's solution: to chlorinated lime, anhydrous sodium carbonate and sodium bicarbonate. Among these three products the latter two are of a practically adequate constancy, but this is not the case with the first. Its content in active chlorin (decolorizing chlorin) varies within wide limits, and it is absolutely indispensable to titrate it before using

Titration of the Chlorinated Lime. There must be on hand for this special purpose:

A 25 c.c. buret graduated in 0.1 c.c.

A pipet gaged for 10 c.c.

A decinormal solution of sodium thiosulphate (hyposulphite).

This decinormal solution of sodium

thiosulphate can be obtained in the market; it can also be prepared by dissolving 25 gm. of pure crystalline sodium thiosulphate in 1 liter of distilled water, and verifying by the decoloration of an equal volume of the decinormal solution of iodin by this solution. The iodin is prepared by dissolving 1.27 gm. iodin and 5 gm. potassium iodid in 100 c.c. of water.

The material for the dosage thus provided, a sample of the provision of chlorinated lime on hand is taken up either with a special sound or in small quantities from the mass which then are carefully mixed.

Weigh out 20 gm. of this average sample, mix it as completely as possible with 1 liter of ordinary water, and leave it in contact for a few hours, agitating it from time to time. Filter.

Measure exactly with the gaged pipet 10 c.c. of the clear fluid, add to it 20 c.c. of a 1:10 solution of potassium iodid and 2 c.c. of acetic or hydrochloric acid. Drop, a drop at a time, into this mixture a decinormal solution of sodium thiosulphate until decoloration is complete.

The number of cubic centimeters of the hypochlorite solution required for complete decoloration, multiplied by 1.775 gives the weight of the active chlorin contained in 100 gm. of the chlorinated lime.

This figure being known, it is applied to the accompanying table, which will give the quantities of chlorinated lime, of sodium carbonate and of sodium bicarbonate which are to be employed to prepare 10 liters of Dakin's solution.

<sup>†</sup>The French surgeons were far from a unit in their early and hearty endorsement of Carrel's recommendations, an attitude possibly fostered somewhat by national and professional jealousies. Some of them were wont to refer rather contemptuously to Dakin's solution as Javelle water, a solution in common use by French washerwomen and not a little destructive to the linen of their patrons. Carrel has dwelled sufficiently upon the differences between the Dakin solution and Javelle water and Labarraque's solution. The latter was used to considerable extent during our Civil War. It is not neutral in reaction and is more irritant than the Dakin solution.

QUANTITIES OF INGREDIENTS FOR TEN LITERS OF DAKIN'S SOLUTION.

Titer of Chlorinated Lime.	Chlorinated Lime in Grams.	Anhydrous Sodium Carbonate.	Sodium Bicarbonate, Grams.
20	230	115	96
21	220	110	92
22	210	105	88
22 23 24	200	100	84
24	192	96	80
25	184	92	76
26	177	68	72
27	170	85	70
28 29	164	82	68
29	159	80	66
30	154	77	64
31	148	74	62
32	144	72	60
33	140	70	59
34	135	68	57
35	132	66	55
36	128	64	53
37	124	62	52

Example: If it required 16.6 c.c. of the decinormal solution of the sodium thiosulphate for complete decoloration, the titer of the chlorinated lime in active chlorin is:

 $16.6 \times 1.775 = 29.7 \text{ per cent.}$ 

The quantities to be employed to prepare ten liters of the solution will be in this case:

Chlorinated lime, 154 gm.
Dry sodium carbonate, 77 gm.
Sodium bicarbonate. 62 gm.

If crystalline sodium carbonate is being used, then instead of the 80 gm. of dry carbonate it must be replaced by:

Crystalline sodium carbonate, 220 gm. Preparation of Dakin's Solution. To

prepare 10 liters of the solution:

1. Weigh exactly the quantities of chlorinated lime, sodium carbonate and sodium bicarbonate which have been determined in the course of the preceding trial.

- 2. Place in a 12 liter jar the chlorinated lime and 5 liters of ordinary water, agitate vigorously for a few minutes, and leave in contact for from six to twelve hours, over night, for instance.
- 3. At the same time dissolve, cold, in the five other liters of water the sodium carbonate and the bicarbonate.
- 4. Pour all at once the solution of the sodium salts into the jar containing the maceration of chlorinated lime, agitate vigorously for a few minutes, and leave it quiet to permit the calcium carbonate to settle as it forms. At the end of half an hour, siphon the liquid and filter it through double paper to obtain an entirely limpid product, which must be protected from light.

Light, in fact, alters quite rapidly solutions of hypochlorite, and it is indispensable to protect from its action the solutions which are to be preserved. The best way to realize these conditions is to keep the finished fluid in large wiker-covered demijohns of black glass.

Titration of Dakin's Solution. It is a wise precaution to verify, from time to time, the titer of the solution. This titration utilizes the same material and the same chemical substances as are used to determine the active chlorin in the chlorinated lime:

Measure out 10 c.c. of the solution, add 20 c.c. of 1:10 solution of potassium iodid, and 2 c.c. of acetic or hydrochloric acid. Drop, a drop at a time, into this mixture a decinormal solution of sodium thiosulphate until decoloration is complete.

The number of cubic centimeters employed multiplied by 0.03725 will give the weight of the sodium hypochlorite contained in 100 c.c. of the solution.

A solution is correct when, under the conditions given above, from 12 to 13

c.c. of decinormal thiosulphate are required to complete the decoloration:

13 x 0.03725 = 0.485 per cent of NaOC1.

Test for the Alkalinity of Dakin's Solution. It is easy to differentiate the solution obtained by this procedure from the commercial hypochlorites and from Labarraque's solution:

Pour into a glass about 20 c.c. of the fluid, and drop on the surface a few centigrams of phenolphthalein in powdered form. Dakin's solution, correctly prepared, gives absolutely no change in tint, while in the same conditions Javel water and Labarraque's fluid give an intense red coloration which indicates in the latter two solutions the presence of free caustic sodium.

# Apparatus Required for Sterilization of Wounds.

- 1. One liter bottles, the lower opening with an interior diameter of 7 mm.
- 2. Distributing tubes with one, two, three or four branches (Gentile).
- 3. Connecting tubes: (a) cylindric tubes, 2.5 cm. long, interior diameter 4 mm.; (b) cylindric tubes 4 cm. long, interior diameter 7 mm.; (c) Y tubes, interior diameter 7 mm.
  - 4. Mohr pinch-cocks.
- 5. Irrigating tubes. Drain tubes No. 30 (interior diameter 7 mm.).
- 6. Connecting tubes. Drain tubes No. 16 (interior diameter 4 mm.,) closed at one end. Above this end these tubes are perforated with holes from 0.5 to 1 mm. in diameter:
- (a) Tubes perforated for 5 cm., 30 cm. long; (b) Tubes perforated for 10 cm., 30 cm. long; (c) Tubes perforated for 15 cm., 40 cm. long; (d) Tubes perforated for 20 cm., 40 cm. long.

In practice, the drop method of using the Dakin's solution has given way to the use of multiple tubes and intermittent flushings at intervals of one or two hours. The wound is open, so as to permit free egress of the fluid,

and is cleaned so far as practicable of dirt, debris and infectious material. The container of Dakin solution is suspended about six feet above the bed, as a rule. A clamp is attached to the tube that extends from the container to the multiple tubes at the wound. At regular intervals this clamp is released, permitting a flow of from 50 to 150 c.c. of the solution, sufficient to thoroughly soak every part of the wound without loss of the fluid externally. The wound is kept moist with the solution, the frequency of the irrigation depending largely upon the rapidity of evaporation. The dressings should not be permitted to become dry.

# Soon to Go. TRIBUTE TO SERVICE.

Physician will Give a Luncheon at
Country Club Today in Honor of
Former Hospital Internes who
Have Enlisted for Duty
Overseas.

"Dr. Walter Lindley will give a luncheon today at the Los Angeles Country Club in honor of the following former internes of the California Hospital, who have enlisted for the war:

"Maj. C. W. Decker, acting chief surgeon, National Guard; Dr. L. J. Butka and Dr. E. E. Moody, first lieutenants, National Guard; Dr. J. Rae Cowan, Dr. A. R. Dickson, Dr. Louis Josephs and Dr. H. M. Voorhees, first lieutenants, United States Navy; Dr. J. S. Conerty, Dr. C. G. Wharton and Dr. James S. Steinberg, first lieutenants, Medical Reserve Corps.

"Other guests will be the following doctors, also former internes at the hospital: C. W. Pierce, first resident surgeon; W. R. Molony, president State Board of Medical Examiners; H. G. McNeil, S. J. Quint, J. T. M. Allan, G. A. Fielding, John M. Dunsmoor, Harris Garcelon, J. Rollin French, J. J. O'Brien, J. Walter Reeves, C. G.

Stadfield, C. V. Nelson, S. W. Hastings, P. O. Sundin, C. L. Lowman, E. E. Burk, R. A. Holt, Melvin Ellis, Egbert Earl Moody and Thomas G. McDonald."

The above from Los Angeles Times of July 20th refers to a most delightful occasion. Dr. Garcelon of Victorville could not be present but sent a telegram of regret and good fellowship the reading of which was received with applause. There was much enjoyable reminiscent conversation and Major C. W. Decker made a comprehensive and illuminating talk as to the duty of the physician at this serious period of our national life. With a hearty "God speed and safe return' to those who would soon be " somewhere in France" this California Hospital reunion closed with the wish that we might all meet again one year from now.

# MEDIAN AGE OF CALIFORNIA DECEDENTS.

The median age at death in California, half the decedents being younger and half of them older than the age stated, was 52.5 years in 1916, as compared with 51.8 years in 1915, 49.6 years in 1914, 49.4 years in 1913, 49.2 years in 1912, and 48.8 years in 1911. There was thus an advance between 1911 and 1916 of nearly four years in the median age at death in California. The advance in the median age continued without any break whatever throughout the six-year period but was particularly great between 1914 and 1915.

The continued advance in the median age of persons dving in California indicates that the warfare on preventable or postponable deaths is being conducted with success in this state. fewer deaths occur in successive years from typhoid fever, with a median age under 30 years, and as a check is put upon further gains in the death toll for tuberculosis, with a median age around 35 years, people die in California more and more from other causes with higher median ages, such as cancer, nervous ailments, or Bright's disease, each with a median age about 60 years, or even from heart disease, etc., with a median age of nearly 70 years. The net result is an advance in the general median age, which stands as high as 52.5 years for California decedents in 1916. Even though the advance may seem only slight year after year, yet the fact of the making of any advance at all is encouragement for further efforts to prevent deaths from some diseases or at least defer the time for succumbing to other ailments.

The above from the California Board of Health Bulletin taken with our quotation from the National Census report, showing the very low death rate from Typhoid fever and that Los Angeles had the lowest of any city of five hundred thousand population or over, is very encouraging. Physicians the world over should teach that Typhoid fever is a crime not simply a misfortune.

### EDITORIAL NOTES

Drs. D. D. Comstock and Belle Wood-Comstock have located in Pasadena.

Dr. Allen Peek, of Oxnard, has returned from a two months' eastern trip.

The government has sent out a call for 20,000 more medical officers for the army.

Dr. W. E. Ellis, of Calexico, has been appointed first lieutenant in the Officers' Reserve Corps.

Dr. Veturia C. Armstrong, of Los Angeles, has been devoting her vacation to post-graduate work in Stanford and Berkeley.

Drs. Clarence A. Johnson and C. C. Browning are now associates, with offices in the Merritt Building.

Drs. D. J. Frick and H. H. Smith have formed a partnership and located in the I. N. Van Nuys Building.

Dr. A. M. Kern, of Hawthorne, has received his commission as first lieutenant in the Medical Reserve Corps.

Los Angeles County and several other counties are talking of uniting in an outdoor sanatorium for the tuberculous.

Dr. T. Percival Gerson, of Los Angeles, has been forced to undergo an operation on his right knee. In playing with his boys his knee was seriously injured.

The death rate in Los Angeles for the fiscal year, 1916-17 was 11.86 per 1,000. There were normally born in the City of Los Angeles, during the same year 8218.

Dr. A. T. Newcomb has invented a portable X-Ray apparatus for use by army surgeons in the field, which has been adopted by the United States Government.

The city of Los Angeles has, during the past year, had the lowest death rate of any city of its class in the United States. The rate has been 11.87 per one thousand inhabitants.

Dr. C. B. Constable, accompanied by his wife, has left his home in Lompoc, for a transcontinental trip in his automobile. His destination is New York City.

San Diego is finding that a Naval Training Camp in her midst is not an unmixed blessing. The City Council has been obliged to make heavy appropriations to ward off infectious diseases.

Dr. Thomas W. Huntington, the veteran San Francisco surgeon, visited Los Angeles and San Diego, and delivered addresses to physicians on the duties of the medical profession during these perilous times.

Dr. Charles Fremont Powell, 60 years of age, died at his residence in South Pasadena, July 30th, 1917. He graduated from Miami Medical College in 1882, and practiced medicine in Dayton, Ohio, for 36 years.

Gov. Stevens has appointed a surgeon for each of the 129 exemption boards of California. These surgeons are being assigned to boards where they are not acquainted, in order that their decisions may be impartial.

Dr. Richmond C. Lane was recently commissioned assistant surgeon in the United States Navy, with a rank of lieutenant. The people of Glendale gave a dinner in his honor, at which there were nearly 100 guests.

Dr. Frank Friesen has removed his offices to the Pallette-Myers Physicians and Surgeons Building, 1501 South Figueroa Street. This well equipped building has become very popular both with physicians and patients.

Dr. James Watson Woods, age 61 years, who located in Long Beach in 1887, died at his home. July 5, 1917. He was a good citizen and his loss will be felt in the community with which he has so long been identified.

Whether medical students shall be relieved from conscription in order that they may complete their medical education is still a question. It is probable that this course will be pursued, as the army needs many more doctors.

Dr. Roger Lee, formerly of Pasadena and later visiting physician of the Massachusetts General Hospital of Boston, but now in active service in France, and Miss Ella Lyman of Boston, Chairman of Red Cross workers in the same hospital, have announced their engagement.

Major B. F. Hayden, head surgeon at the National Soldiers' Home near Santa Monica, has been called away by the Government; also his first assistant, Dr. J. P. Jones, was called to San Francisco to enter the army service.

Dr. J. L. Pomeroy, former County Health Officer of Los Angeles, is at the training camp for medical men at Ft. Riley, Kansas. He says that more than ten thousand medical officers will be there in training in the course of a few months.

Dr. W. W. Beckett has been appointed as honorary Superintendent of the Billy Sunday Tabernacle Hospital. Dr. Beckett will select his aides and make arrangements whereby a physician and nurses will be on duty in the hospital during every meeting.

The average number of patients in the Los Angeles County Hospital during the year ending July 1, 1917, was 1037.8. Mr. N. R. Martin, the Superintendent, says that the hospital can accommodate 200 war patients in addition to its usual work.

Dr. Egbert Earl Moody, interne of the California Hospital-elect, and first lieutenant in the National Guard, under Major C. W. Decker, has recently passed the State Board of Medical Examiners, receiving the highest rating of any one of the class of 84.

The Los Angeles Times of July 18 says that at least three of the physicians appointed by Governor Stephens on the Draft Exemption Board in Los Angeles, are alleged to be unqualified to act by reason of avowed pro-German sentiments.

Dr. Z. T. Malaby, of Pasadena, has been examining applicants for the second officers' training camp to be opened at the Presidio, August 27. He has also been appointed by Governor Stevens to examine men called under military conscription.

Drs. Norman Bridge and Health Commissioner L. M. Powers are inaugurating a plan to have children taken to a country place for two months where they are to be taught the rudiments of agriculture. This is all to be done with consent of the parents.

Dr. Robert L. I. Smith, of Pasadena, has been assigned to command section 65 of the American Ambulance Corps, now in camp in Allentown; Pa. Dr. Smith has had experience in the war zone, having been a surgeon attached to the hospital maintained by the King and Queen of Belgium.

Dr. W. V. Whitmore and two or three other physicians now have the Arizona Hospital, which is the successor to the Rodgers Hospital in Tucson. Dr. Whitmore is well known in Los Angeles and his many friends here are proud of the fact that he has achieved success in the Sun-kissed State.

Dr. Elizabeth Follansbee, the pioneer woman physician of Los Angeles, has been very ill for some months, and as we go to press she is very low and it is reported, cannot live but a short time. Dr. Follansbee is 75 years of age, and is a woman and a physician that commands the respect of all who know her.

Dr. Frank Dunlap of Brawley, Imperial County, has passed the examination for the Medical Reserve Corps with a rank of Captain. The doctor has been notified that his services will be called for some time during this month. He is one of the most prominent physicians of Imperial Valley and will be greatly missed.

The doctors of the Santa Barbara County Medical Association have agreed to return to the families and dependents on the doctors of the association who entered military service, one-half the fee taken from patients which these enlisted doctors leave in the charge of the doctors remaining at home. There is not any excessive liberality in this proposition.

The will of Dr. Charles H. Whitman, late Medical Director of the County Hospital, was filed for probate on July 11. The will estimates his estate at \$10,000 and leaves it in trust. It provides that \$20 per month be paid to each of his daughters, Bessie Whitman Hollenger and Olive Whitman, and that but of the residue, the widow, Eleanor Whitman, is to be paid \$75.00 per month.

Dr. H. H. Sherk, of Pasadena, and Dr. William Duffield, of Los Angeles, are doing valuable work in Santa Barbara, San Diego, and other cities of Southern California, delivering addresses to the physicians of these places, in regard to Red Cross work in its relation to the surgeon and the physician. Dr. Sherk is chairman of the Southern California branch of the State Committee of National defense.

Dr. Harold Sidebotham and Dr. Phillip S. Chancellor of Santa Barbara, are waiting call to service in the 30th Military hospital which is being organzed in San Francisco for service in Europe. Dr. Sidebotham is to be

director of laboratories in the hospital and Dr. Chancellor is to be director of the medical section. The two men recently passed their physical examination in San Francisco and are now ready for service as soon as called.

Dr. Warren H. Slabaugh has been appointed Assistant Health Commissioner of Los Angeles at a salary of \$150 per month, by Dr. L. M. Powers. Dr. Slabaugh succeeds Dr. E. D. Ward. He graduated from Bellevue Hospital, Medical College, thirty-three years ago, and has been in California seven years.

Several tons of Soya beans have been imported to Los Angeles from China. It is an excellent substitute for meat, containing nearly 20% fat. It is said to be a particularly good food for diabetics.

Dr. Edmund David Ward, for six years assistant commissioner of Los Angeles under Dr. Powers, has assumed his duties as District Health Officer; his territory including Santa Barbara, Ventura, Los Angeles, Orange and San Diego Counties. His office is in the Union League Bldg., and his salary is three thousand dollars a year and expenses. Dr. Ward stood the highest in the competative examination held by the State Board of Health. His duty is to give assistance to the local health department, in preventing the spread of epidemic diseases.

## **BOOK REVIEWS**

EINHORN. DISEASES OF THE STOM-ACH. A textbook for practitioners and students. By MAX EINHORN, M.D., Professor of Medicine at the New York Post-Graduate Medical School and Hospital; Visiting Physician to the German Hospital. Sixth revised and enlarged edition. New York: William Wood & Co., 1917. Price: \$4.00 net.

Einhorn is a clinician of high repute, out can scarcely be considered up-todate in radiology when he states (page 13) that it requires ten to fifteen seconds to radiograph the stomach, for now-a-days a second is considered a rather long exposure for such plates. This must not lead you to infer that Einhorn is not thoroughly up-to-date in the clinical aspects of his specialty. There is probably no better gastrologist, and all his contributions to medical literature are of the highest order. Indeed, this volume is so excellent that we hesitate to call attention to his radiologic lapse.

PROGRESSIVE MEDICINE. Volume XX, No. 2, June 1, 1917. A quarterly digest of advances, discoveries and improvements in the medical and surgical sciences. Edited by HOBART AMORY HARE, M.D., Professor of Therapeutics, Materia Medica and Diagnosis in the Jefferson Medical College, Philadelphia; assisted by Leighton F. Appleman, M.D., Instructor in Therapeutics, Jefferson Medical College, Philadelphia. Owners and Publishers: Lea & Febiger, Philadelphia and New York. Price: Six dollars per annum.

Every issue of this excellent epitome of contemporary literature seems to be better and of more practical value than its predecessor. This volume opens with thirty pages devoted to hernia. You will find Progressive Medicine interesting and profitable, whatever your specialty may be. We are especially interested in the review of Intrahepatic cholelithiasis, having recently seen a case in which the diagnosis was made by means of the X-ray before operation.

ROENTGEN TECHNIC (DIAGNOSTIC). By NORMAN C. PRINCE, M.D., Attending Roentgenologist to the Omaha Free Dental Dispensary for Children; Associate Roentgenologist to the Douglas County Hospital, Bishop Clarkson Memorial Hospital, Swedish Immanual Hospital, St. Joseph's Hospital, and Ford Hospital, Omaha, Nebraska. With seventy-one illustrations. St. Louis: C. V. Mosby Co., 1917.

This handy little volume is full of useful technic most lucidly presented. We take pleasure in commending it to physicians who have installed X-ray equipments.

INTERNATIONAL CLINICS. Volume II, Twenty-seventh Series, 1917. J. B. Lippincott Co.

This valuable collection of original articles maintains its high standard of excellency. The publication of "clinics" is becoming more and more popular, so that we find here a section devoted to Clinics. Other sections are assigned to Medicine, Treatment, Dermatology, Gynaecology, Ophthalmology, Surgery and History. In this issue the section on History is devoted to Giovanni Maria Lancisi (1654-1720), by John Foote, of Washington. We

note in the published Skin Clinic of Dr. M. B. Hartzell, the statement that for epithelioma "the most satisfactory treatment is the X-ray," a statement that agrees with our experience and is in line with the teaching of those who know.

ANATOMY, YOUNG. Hand-book of Anatomy, being a complete Compend of Anatomy, including the anatomy of the viscera, a chapter on dental anatomy, numerous tables, and incorporating the newer nomenclature adopted by the German Anatomical Society, generally designated the Basle Nomenclature or BNA. By JAMES K. YOUNG, M.D., F.A.C.S., Professor of Orthopedic Surgery, Philadelphia Polyclinic; Associate Professor of Orthopedic Surgery, University of Pennsylvania; Orthopedic Surgeon to the Philadelphia General Hositpal; Fellow of the College of Physicians of Philadelphia; Fellow of the Philadelphia General Hositpal; Fellow of the College of Physicians of Philadelphia; Fellow of the American Medical Association, etc., etc. Fifth edition, revised and enlarged. With 154 engravings, some in colors. Philadelphia: F. A. Davis Co., Publishers, English depot: Stanley Phillips, London, 1917. Price: \$2.00 net.

The illustrations in the Chapter on Osteology are clearer cuts than appeared in the previous editions. There has been added a chapter on Dental Anatomy, including the anatomy of the face, teeth and jaws. prepared by Joseph L. Appleton, Jr., B.S., D.D.S., of The Thomas W. Evans Museum and Institute of Dentistry, University of Pennsylvania.

ACUTE POLIOMYELITIS. By GEORGE DRAPER, M.D., Associate in Medicine, College of Physicians and Surgeons, Columbia University; Associate Attending Physician, Presbyterian Hospital, New York City. With a foreword by SIMON FLEXNER. With nineteen illustrations. Philadelphia: P. Blakiston's Son & Co., 1012 Walnut Street. Price \$1.50 net.

This is a small practical guide to the diagnosis, care and specific treatment of epidemic poliomyelitis. The author is well qualified to write upon the subject, having been intimately associated with the work of the Rockefeller Hospital during the recent epidemic of poliomyelitis in the east.

HAND-BOOK OF GYNECOLOGY. For students and practitioners. By HENRY FOSTER LEWIS, A.B., M.D., Professor and Head of Department of Obstetrics and Gynecology in Loyola University School of Medicine; Chief of Obstetric Staff of Cook County Hospital; Fellow and Ex-President of the Chicago Gynecological Society; Late Assistant Professor of Obstetrics and Gynecology in Rush Medical College (in affiliation with the University of Chicago), and ALFRED DE ROULET, B.Sc., M.S., M.D., Professor of Gynecology in Loyola University School of Medicine; Attending Gynecologist to the House of the Good Shepherd, and to St. Bernard's Hospital; Obstetrician and Chief of Staff of St. Margaret's Home and Hospital, With one hundred and seventy-seven illustrations. St. Louis: C. V. Mosby Co., 1917.

The writers have adopted a modern method of classification on the basis of etiology and pathology. For instance, the infections of various types are presented as they affect the different tissues and organs. Neoplasms, traumas and malformations are treated in like manner. It is a well written and well illustrated small work on gynecology, eminently well suited to the requirements of third and fourth-year students and general practitioners.

THE PRACTICAL MEDICINE SERIES. Comprising ten volumes on the year's progress in Medicine and Surgery. Under the general editorial charge of CHARLES L. MIX, A.M., M.D., Professor of Physical Diagnosis in the Northwestern University Medical School.

School.

GENERAL SURGERY. Edited by Albert J. Ochsner, M.D., F.R.M.S., LL.D., F.A.C.S., Surgeon-in-chief Augustana and St. Mary's of Nazareth Hospitals; Professor of Surgery in the Medical Department of the State University of Illinois. 1917. Chicago: The Year Book Publishers, 608 South Dearborn Street.

THE EYE, EAR, NOSE AND THROAT. Edited by Casey A. Wood, C.M., M.D., D.C.L.; Albert H. Andrews, M.D., and George E. Shambaugh, M.D. 1917

The price of the Series of ten volumes is \$10.00; the volume on Surgery sells for \$2.00, and the Eye, Ear, Nose and Throat volume for \$1.50.

This volume on General Surgery appears under the editorship of Dr. Ochsner, a worthy successor of a worthy predecessor, Dr. John B. Murphy. During the past year the field of military surgery has been especially rich in papers from many surgeons of many nations, covering every portion of the

body. Almost invariably the condition treated was complicated by severe infection. During the earlier months of the present war tetanus was very common, but it seems that the prophylactic injection of antitetanic serum has had the effect of producing a very marked reduction in the occurrence of tetanus. Of the various antiseptic methods of treating infect d wounds, it seems that free drainage, moist dressings and constant attentions have given the best results.

OBSTETRICAL NOTES. By LYLE G. McNEILE, M.D., Los Angeles. Special edition. Price: \$3.00 net.

These notes were compiled to relieve the Doctor's students from the bugbear of note taking with its incident imperfections in the way of errors and omissions. They cover the subjects of Obstetrics and Operative Obstetrics, are systematic and bring the subjects quite up to date.

POTTER'S COMPEND OF MATERIA MEDICA, THERAPEUTICS AND PRESCRIPTION WRITING. Based on the Ninth revision of the U.S. P. By A. D. BUSH, B.S., M.D., Professor of Physiology and Pharmacology, Medical Department University of Southern California. Eighth edition, revised. Philadelphia: P. Blakiston's Son & Co., 1012 Walnut Street. Price: \$1.25 net.

Potter's Materia Medica needs no introduction. It is if possible better than ever. There is no more practical textbook published.

PHYSICAL EXERCISES FOR INVALIDS AND CONVALESCENTS. By EDWARD H. OCHSNER, B.S., M.D., F.A.C.S., President of the Illinois State Charities Commission; Attending Surgeon Augustana Hospital, Chicago. Illustrated. St. Louis: C. V. Mosby Co., 1917.

A useful manual for sedentary persons, convalescents and patients in need of proper physical exercise. The directions are excathedra and explicit, the illustrations descriptive and well selected. It covers the subject remarkably well within the compass of fifty-four pages.



# During Pregnancy

TANCLIND Liquid Paraffin is an admirable laxative for use during pregnancy. It produces no irritation of the bowel, has not the slightest disturbing influence upon the uterus, and no effect upon the fetus.

The regular use of Stanolind Liquid Paraffin in the later months of pregnancy is an effective means of avoiding some of the serious dangers attending the parturient state because of sluggish bowel action.

Stanolind Liquid Paraffin counteracts to a definite extent an unfortunate dietetic effect on the intestine in this manner, the concentrated diet of our modern civilized life containes so little indigestible material that the residue is apt to form a pasty mass which tends to adhere to the intestinal wall. Stanolind Liquid Paraffin modifies this food residue, and thus tends to render the mass less adhesive.

Stanolind Liquid Paraffin is mechanical in action, lubricating in effect. Its sucrity is one of the reasons why increase of dose is never needful after the proper amount is once ascertained.

A trial quantity with informative booklet will be sent on requust.

# Standard Oil Company

(Indiana)
72 West Adams Street

Chicago, U.S.A.

738



Vol. XXXII.

LOS ANGELES, SEPTEMBER, 1917

No. 9

DR. GEO. E. MALSBARY.

Associate Editors,

Dr. Walter Lindley, Dr. W. W. Watkins, Dr. Ross Moore, Dr. George L. Cole,
Dr. Cecil E. Reynolds, Dr. William A. Edwards, Dr. Andrew W. Morton,
Dr. H. D'Arcy Power, Dr. B. J. O'Neill, Dr. C. G. Stivers, Dr.
Boardman Reed, Dr. W. H. Dudley, Dr. J. M. Mathews.

## VESICOVAGINAL FISTULA.

BY C. F. THOMAS, M.D., LOS ANGELES CALIFORNIA.

My excuse for writing on, this old and well known subject is; first, because of the greater number or cases occurring now; and secondly because of the number of surgical failures reported in these cases. When a woman comes to us with a bladder leaking from this cause, about the first thing she says is that she has had from one to seven unsuccessful operations for its cure, and that she is about ready to give up trying.

It would be unfair for one to write on this subject and not give due credit to Marion Sims, who spent much time and energy operating colored women of the South before working out a reasonably successful technique. It is a matter of history that he not only did the work for nothing, but actually provided hospital care for many of these patients during their long and tedious convalescence.

In early days the causative factor in vesicovaginal fistula was usually pressure necrosis, due either to protracted labor, or possibly to bunglesome instrumentation at time of labor. A few cases were also reported due to long continued wearing of some form of vaginal pessary.

A more recent, as well as more frequent, cause of fistula now presents itself and awakens new interest in its cure. I refer to fistulae-complicating operations on the uterus and vaginal tract for conditions not directly connected with parturition.

When operating for cervical cancer, especially by the Percy method, it occasionally becomes necessary to open the bladder. Or the high-heat method may cause a slough into the bladder, requiring a subsequent operation for its cure. I would say, however, that a permanent opening into the bladder as a sequence to a simple hysterectomy for fibroid would indicate lack either of skill or of care. I venture the suggestion that most of the cases of this origin are caused by men who have had little or no training in surgery.

Urethral and ureterovaginal fistulae are sometimes mistaken for vesicovaginal fistulae. By injecting a colored fluid into the bladder and watching it escape through the fistula, one will be enabled to differentiate between the varieties. The opening may be large enough to admit two fingers, or may be the size of a pin hole. When a vesicovaginal fistula is very small, it may be difficult to find, especially in cases where the uterus has been removed. The colored-fluid injection will aid also in finding these.

When a vesicovaginal fistula of traumatic origin is first discovered, if a mushroom-tipped, self-retaining, soft-rubber catheter is left in the bladder the fistula may close spontaneously. If it is not closed in four weeks of such treatment, during all of which time the bladder has been kept clean and free from infection as possible, it is safe to predict that a spontaneous cure will not take place.

Suturing of incised, lacerated, or punctured wounds of the bladder, if done at once, give most satisfactory results.

Chromic catgut is the best suture material. The stitches must be so placed as to bring raw surfaces in perfect apposition without tension, yet they must not project into the bladder for fear of causing stone formation.

Ureterovaginal fistulae may be cured either by abdominal section with transplantation of the ureter high into the bladder, or by silk ligation of the ureter below and above the fistula, thus destroying the function of the kidney on that side. Prior to the latter procedure, however, one must be sure that the opposite kidney is normal.

Very small urinary fistulae of either variety may sometimes be cured by passing a red-hot probe or electrically heated wire through it. A self-retaining catheter is then put into the bladder and the patient kept in bed for ten days.

Secondary operation for vaginal fistulae should not be undertaken until all acute inflammation has subsided and complete cicatrization has taken place.

The successful operative treatment of the larger vesicovaginal fistulae depends upon the careful carrying out of the following procedure:

- 1. A good light and free exposure of the opening. When the uterus has been removed, this latter is not always an easy matter.
  - 2. Thorough denudation.
- 3. Careful coaptation without tension of the denuded surfaces.
- Correct placing of the proper suture material.
- operation. bed three weeks after
- 6. A Self-retaining catheter kept in for two weeks, which must be kept clear.

when we remember that the lower part of the bladder wall is in reality a diaphragm and never entirely at rest, we can understand why it is so difficult to get primary union when its wall is broken. The movement of it due to urinary distention can be prevented by catheter drainage, but the movement due to abdominal breathing and varying intra-abdominal pressure is not controllable. Rest in bed, however, does limit it to some extent.

The patient should be in the dorsal position during the operation with the hips slightly raised. A broad, self-retaining vaginal tractor and a good reflected light should be used.

If the uterus is still in place, the front lip of the cervix is caught by a tenaculum forceps and brought well down and out. If there is no uterus, then the vaginal wall surrounding the opening may be caught by four Allis forceps and brought as near the outside as possible.

Another Allis forceps is then made

to catch the edge of the opening, and with a straight cataract knife by one sweep a circular cut is made all around the opening, being sure that a complete ring is made containing all the layers of the wall.

An examination of the cut surface will show if there is an inequality or an excess of scar tissue in one part, and, if so, more paring is done until good healthy raw surfaces of the same thickness are obtained, which should be reasonably free from scar tissue.

Then by the use of the Allis forceps ascertain the direction of least resistance to coaptation and sew it that way. It makes no difference in the end result whether the line of suture is longitudinal, transverse, or oblique to the long axis of the vagina, so long as accurate coaptation is made without tension. It sometimes becomes necessary to make rather deep vaginal incisions lateral to and parallel with the long axis of the suture line in order to lessen tension.

With a small, sharp, fish-hook-shaped needle, doubly threaded with fine silk or linen for a leader, number 24 silver wire sutures should be drawn through all the layers of the wall, barely catching the edge of the bladder mucosa every third of an inch, and the ends of the wires left long. After all are

in posistion an Avellin coil and shot are used to fasten each wire just tightly enough to coapt the cut surfaces without tension.

The coil and shot enable one to make just the right tension and are easy to remove. Should a white line appear along the sutures when the work is complete, it will indicate too much tension or too many sutures, and this condition should be remedied at once.

The self-retaining catheter is now inserted through the urethra and kept there for two weeks. The stitches are removed at the end of two weeks during all of which time the patient is kept in bed.

The bladder should be irrigated twice daily while the catheter is in, with not more than two ounces at a time of a sterile saturated solution of boric acid. Urethrovaginal fistulae may be treated the same way, except that the suture line should be transverse, and the closure made around a large, self-retaining rubber catheter, which is left in for ten days.

This procedure may appear rather elaborate to you, but, when one has a few failures to his credit and then finds that this method, if followed in its entirety, is universally successful, he will then consider it well worth while. 308 Consolidated Realty Bldg.

## A SYSTEM FOR SCORING MORALS OR CHARACTER QUALITIES.

BY G. HARDY CLARK, M.D., LONG BEACH, CALIFORNIA.

The standardization of measurements of the mental acuity and capacity of the human individual has received much attention during the past two decades, both by laboratory methods and through the development and use of systems of grading employed in our courts and training schools. Certainly very satisfactory results have been obtained, and classifications of inesti-

mable value have resulted, especially from the use of the Binet-Simon system and its modifications. However, the measurement of morals qualities in such manner as to grade the fundamental social values of the individual has not made marked progress, and it is evident that until a system has been evolved that will secure such measurements with an acceptable degree of

accuracy methods of training in rightmindedness and good citizenship must remain quite empirical, and degrees of criminality and character abnormalities cannot be accurately registered and graphically portrayed.

For the purposes of this paper judgment of character or morals qualities is based upon the efficiency of the individual in guarding and promoting the safety and welfare of his community. However, as each individual's life is filled with complex acts that are expressive of character qualities it is evident that a sufficient number of elements that make for safety and welfare must be used to fully cover such acts, and to give stability to a system of grading.

The elements that are here proposed deal with the individual's care of his own person and needs; his share in the industrial life of his community; his acquirement of substance in the community in an ethical manner; his acceptance of the duty of conserving its resources; acceptance of responsibility for his acts: conformation to the customs, dress and ornamentation of his fellows; exercise of initiative; abstention from injurious practices; valuation of time; possession of normal nervous stability and control.

It will be observed that these elements are not separable entities but are, instead, homogeneous with the central morals content. Indeed it is found in practice that any element used is so intimately bound with the others that failure to give it a proper valuation will be discovered in the process of placing true valuations on the others.

The score may be arranged in the following form, giving to each of the elements an arbitrary valuation of temper cent of the total ideal score.

r er re	
Sec	re
First: His ability and readiness to	
care for his own person and needs. 10	)
Second: Ability and readiness to	
	1
care for his family	,
Third: Methods of obtaining money	
or its equivalent 10	)
Fourth: Tendency to conserve pri-	
vate, family and public resources 10	)
Fifth: Tendency to accept responsi-	
bility for his acts	)
Sixth: Estimation of the purpose	,
and value of dress and ornamenta-	
	`
tion 10	
Seventh: Moral Initiative 10	)
Eighth: Ability to abstain from	
harmful foods, habit-forming drugs	
and injurious practices 10	)
Ninth: Valuation and use of time 10	
Tenth: Facial and ocular expression,	
nervous stability, moroseness,	
flashes of anger, destructiveness,	,
foolish remarks and laughter 10	)
Perfection10	0%

Donfoot

It is evident that the number of scorable elements here given may be increased or diminished without materially changing the final character percentage provided, of course, those selected fully cover all possible objective character manifestations, and that they are all invariably used in all subjects examined.

In determining the score to be given in the first element, "His ability and readiness to care for his own person and needs," it should be learned if the subject is waited upon, to what extent, and if he waits to be waited upon. Is he orderly. What would be the condition of his room if it were left to himself: of each article of his clothing. Would he bathe, shave, keep his hair, nails and teeth in order, etc., etc.

In judging values in the second element, "Ability and readiness to care for his family," helpfulness from a sense of love of his fellows, and a desire to aid and relieve them, should be the guiding idea. Does he assist in the routine duties of the home such as sweeping, dusting, cleaning, cooking, setting the table, washing dishes, carrying fuel and water. Does he entertain and instruct his children;

carefully select and fully provide food air, exercise and sunshine, etc., etc.

In the third element, "Methods of obtaining money and its equivalents," it should be learned if he has attained a profession or trade, what wage he, even a child, is earning, and how long he keeps his jobs. Especially should it be known if he obtains money and its equivalents without the proper expenditure of effort, and if he treats anyone unfairly for his gain,

The fourth element, "Tendency to conserve private, family or public resources," should be judged by inquiry into his practice of investing or spending five cents, fifty cents, one hundred dollars, or one thousand dollars. Is he provident. Is he helpful with his money.

"The tendency to accept responsibility," the fifth element should be judged by his lovalty, in time of need, to his children, wife, parents, city, state and nation. His readiness to accept punishment for mischievous acts, etc., etc.

The sixth element, "Estimation of the purpose and value of dress and ornamentation," refers to his practice of suiting his dress to his station, his work and play. Whether or not he affects striking colors and contrasts. If a girl or woman, does she wear striking earrings, finger rings, bracelets, cosmetics, perfumes and ribbons. To what extent do her tastes in dress and ornaments resemble those of primitive man.

Seventh, "Moral initiative," refers to his practice of assuming leadership in matters pertaining to the advancement of his playmates, family, and to the general social order and progress.

In scoring the eighth element, "Ability to abstain from harmful foods, habit-forming drugs and injurious practices," it should be remarked that persons of low character qualities have low resisting powers. They eat with little discrimination, and steal food. Older subjects use alcohol, tobacco, opiates and similar destructive drugs, with little or no restraint, and all are ready victims of other injurious practices.

The ninth element, "Valuation and use of time," is judged on the broad basis of actions on the part of the subject that tend finally to secure the greatest social advancement. These are fundamental social acts common to the hive, the herd, the family and the state. In giving a percentage score upon the valuation and use of time one takes into account the stupor of the dement and the restless activities of the maniac: the neglect of family and social duties, and the disorganizing acts of the financial egoist, etc., and places them in contrast with the Christian ideal of social excellence.

Facial and ocular expression, in which particular attention is paid to kindness and efficiency, are intimately associated with nervous stability (continuity and purposefulness of words and acts), flashes of anger, destructiveness and foolish remarks and laughter are grouped together as the tenth element in the system. In scoring the element judgment of facial and ocular expression must not be seriously influenced by fleeting emotional disturbances, but should be securely fixed by the evidences of the more settled formative cerebral influences. and the other parts of the element by their objective expressions in social intercourse.

Mr. J. Harold Williams, Director of the Department of Research in the Whittier State School, California, has very kindly scored for me twenty-five boys, of whom nine were morons, two borderline, two dull-normal, eleven average-normal and one superior. All were committed to this institution by the juvenile court. The group gives an average score of forty-nine and three-fourths per cent.

Dr. W. B. Kern, Medical Superintendent of the Norwalk State Hospital, California, at my request very kindly scored thirty-three patients in that institution. Of these seventeen were cases of dementia praecox with psychosis, seven manic depressive with psychosis, three alcoholic with psychosis, two paranoia, two epilepsy with psychosis, one senile psychosis and one involution melancholia. The group gives an average character score of twenty-one per cent. The average differences between the scoring of these subjects by Dr. Kern and his assistant, Dr. Sisson, was approximately five per cent.

The following records of subjects examined illustrate the manner in which the score may be used.

Case 1. D. S. girl, age, 8 years, normal mental age. Character score: No. 1, 8: No. 2, 8: No. 3, 9: No. 4, 8.5: No. 5, 9.5: No. 6, 8.5: No. 7, 7: No. 8, 7.5: No. 9, 8.5: No. 10, 9. Total 82.5.

Case 2. W. L. boy, age 11 years, normal mental age, but has been greatly humored by his parents since his recovery from a severe illness four years ago. Character score: No. 1, 5.5: No. 2, 5: No. 3, 9: No. 4, 9: No. 5, 8.5: No. 6, 8.5: No. 7, 7.5: No. 8, 8.5: No. 9, 8.5: No. 10, 7.5. Total 77.5.

Case 3. W. M. girl, 8 years, mental age 7 years. Persists in stealing small sums of money from her parents. Character score: No. 1, 6: No. 2, 7.5: No. 3, 5: No. 4, 6: No. 5, 6: No. 6, 5: No. 7, 3: No. 8, 3: No. 9, 8: No. 10, 8. Total 57.5.

Case 4. B. B. girl, 8 years, mental age 3.5 years. Character score: No. 1, 3: No. 2, 3: No. 3, 4.5: No. 4, 3:



No. 5, 2: No. 6, 3: No. 7, 2: No. 8, 0: No. 9, 2: No. 10, 2. Total 25.5.

The various expressions of character qualities of these subjects are graphically illustrated in the chart. Here also are most readily distinguished the very great differences in the social values of the children.

In conclusion I wish to state that it is inconceivable that the well-known elements upon which all social life is built shall not lend themselves with increasing accuracy to the establishment of an acceptable standard conduct, and to the measurement of variations from that standard. If the system here proposed will aid in the accomplishment of such a greatly desired end my purpose in publishing it will be accomplished.

411 Marine Bank Building.

### GOUT AND INFECTIOUS ARTHRITIS.

### By Henry A. Christian, M. D.

In two clinical lectures, in the International Clinics for June, Christian considers the differential points between Gout and acute and chronic Arthritis.

There are three types of Gout:-First, obvious depositions of urates in the bone or in the cartilage, or in both.

Second, in which that does not occur, but in which there are chronic arthritic changes, with exostoses and associated atrophy of the cartilage, etc., sometimes with depositions of urates in the soft parts around the bone, adjacent to the bone, but not in the bone.

Third, very little change in the joints, inflammatory change in the soft parts, but no obvious der ition of urates in the soft parts bout the joints or in the bones or cartilage. In all three types depositions of urates in the ears occur giving typical tophi that are easily recognized.

In regard to the value of Uric Acid Metabolism studies, Christian points out that we are dealing with a substance which is present in the blood and in the urine in relatively very small quantities. Anything present in small quantities brings up the possibility of error in its determination. In the second place, we are dealing with a substance which in the blood is very difficult of quantitive determination, and there is still a question as to whether the methods available are satisfactory; or, to put it another way, other substances than uric acid may cause the same calorimetric changes which are used by Folin in his method of determining the uric acid

In regard to the X-rays he states that we are justified in calling Gout only those cases in which there is the typical punched-out area in the bones with thickening in the bony substance around the area.

#### AGE AND ACCOMPLISHMENT.

"But why, you ask me should this tale be told

To men grown old, or growing old? It is too late! Ah, nothing is too late Till the tired heart shall cease to palpitate.

Cato learned Greek at 80; Sophocles Wrote his grand Oedipus, and Simonides

Bore off the prize of verse from his compeers

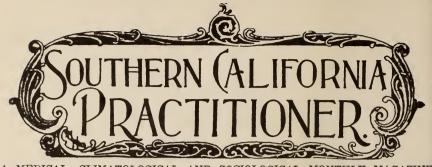
When each had numbered more than fourscore years.

And Theophrastus, at fourscore and

Had but begun his 'Characters of Men.'

Chaucer at Woodstock with the nightingales

At 60 wrote the 'Canterbury Tales.' Goethe at Weimar, toiling to the last, Completed 'Faust' when 80 years were past." -Longfellow.



A MEDICAL, CLIMATOLOGICAL AND SOCIOLOGICAL MONTHLY MAGAZINE.

This journal endeavors to mirror the progress of the profession of California and Arizona.

Established in 1886 by Walter Lindley, M.D., LL.D. DR. GEORGE E. MALSBARY, Editor and Publisher.

Associate Editors,

Dr. Walter Lindley, Dr. W. W. Watkins, Dr. Ross Moore, Dr. George L. Cole, Dr. Cecil E. Reynolds, Dr. William A. Edwards, Dr. Andrew W. Morton, Dr. H. D'Arcy Power, Dr. B. J. O'Neill, Dr. C. G. Stivers, Dr. Boardman Reed, Dr. W. H. Dudley, Dr. J. M. Mathews.

Address all communications and manuscripts to

EDITOR SOUTHERN CALIFORNIA PRACTITIONER,

Subscription Price, per annum, \$2.00. 1414 South Hope

1414 South Hope Street, Los Angeles, Cal.

### EDITORIAL

# DEGENERACY—THE VALUE OF A MAN.

There never was a time in the history of the earth when a man's value was more thoroughly appreciated. Our Exemption Boards have discovered what a great proportion of the young men of America are defective.

A recent article by A. F. Tredgold on the Problem of Degeneracy, contains much that is illuminating. He starts out with the proposition that the individual is dependent upon two factors, namely, the seed from which he is derived, and the soil in which the seed is grown. He then goes through the usual process of weighing the influence of heredity and environment. Degeneracy he says is "a retrograde condition of the individual cell;" in other words Degeneracy is the expression of a germ variation.

In speaking of women losing their capacity for reproduction between the 40th and 50th year, he says that children born towards the end of the female reproductive period tend to be feebler than those born whilst the gen-

erative organs are in full vigor, and that this is due to a senility of the maternal tissues which nourish the seed or to a senility of the seed.

In speaking of the inter-marrying of relatives, he says such marriages intensify any existing defects of a family. Some people bewail the marriage of members of our prominent families to chorus girls and the like; while the fact is, it is a matter of congratulation, as it brings in an entirely new strain of blood.

Dr. Tredgold advocates the idea that environment has great influence in the product of germ-variations and that the germ cell must react to and be influenced by its environment, especially is this shown in the nervous system, giving it manifestations of degeneracy known as the neuropathic diathesis.

This diathesis tends to early mental dissolution or dementia to hysteria, epilepsy and insanity, while if still more marked, it results in feeblemindedness, imbecility or idiocy. Some members of such stock may result in

one of these conditions, while others may represent different conditions. The history of an ancestral alcoholism or tuberculosis is frequently found. Idiocy, insanity and epilepsy as such are not inherited. Inheritance consists, not in the transmission of actual qualities, but in the potentiality to develop these qualities under an appropriate stimulus.

Fortunately idiots and low grade imbeciles are usually sterile. All the off-spring of two degenerate persons are defective. The children resulting from the union of a degenerate with a healthy individual, have invariably abnormal constitutions.

The only thorough plan of preventing a deteriorization of the race, is sterilization of the unfit. The public is being slowly educated to this as the only way and it is the physician who must disseminate this idea.

### GRADING MORAL DEVELOPMENT.

In this issue we are publishing an original paper on the grading of moral development. We have become well accustomed to the grading of physical and mental development, so that we are in a measure prepared for the grading of moral development. It has been shown that there is often marked difference between mental development and moral development, just as there is between physical development and either mental or moral development. This in no wise negatives the value of proper physical and mental training. The Clark scale seems to have a scientific foundation. The following table gives results obtained at the Whittier State School Department of Research. Whittier, California. The numbers refer to the tests described in Dr. Clark's paper, which is published herewith.

			CLAI	RK	SCA	LE	FOR	GR	ADII	NG M	IOR.	AL	DEVELOPMENT.		
			(Scor	es e	of Bo	oys a	t the	Whi	ttier	State	Sch	nool,	January 24, 1917.)		
	Case	I	II I	II	IV	V	VI	VII	VIII	IX	X	Total	Group	Age at	I.Q.
	No.	_										2000		Comm.	
	1	5	4	5	3	4	5	5	5	5	5	46	Borderline		.82
	2	8	4	7	5	5	8	4	8	5	7	61	Dull-Normal	12	.83
	3	3	2	3	3	1	5	3	2	3	2	27	AvNormal	. 14	. 95
	4	9	8	7	5	7	8	4	6	8	9	71	AvNormal		1.02
	5	4	3	2	5	3	4	2	5	6	5	39	AvNormal		. 94
	6	8	9	6	7	8	9	5	9	8	9	78	AvNormal	14	.89
	7	5	3	5	2	4	6	4	8	4	7	48	Moron		. 65
	8	3	1	2	3	1	5	2	6	4	6	33	Moron		.74
	9	5	4	5	4	5	4	2	5	4	7	45	AvNormal		. 93
	10	7	6	5	6	5	7	5	6	7	9	63	Moron		. 68
	11	8	5	8	8	7	6	5	7	8	7	69	Dull-Normal		. 83
	12	7	6	4	5	5	7	4	7	6	8	59	Superior	. 13	1.18
	13	6	5	4	5	5	7	4	6	5	7	54			1.03
	14	5	7	4	5	5	5	4	7	6	7	55	Moron		. 77
	15	7	6	8	7	6	7	5	6	7	6	65	Borderline		.73
١	16	4	4	3	5	4	6	3	5	5	4	43	Moron		.66
	17	7	2	2	5	1	5	2	5	3	5	37	AvNormal		1.08
	18	5	6	4	5	4	6	4	5	5	7	51	Moron		.72
	19	6	3	4	3	5	5	2	3	3	3	37	AvNormal		.92
	20	7	6	5	4	5	7	3	7	6	5	55	AvNormal		1.02
	21	6	5	7	7	5	8	4	3	6	8	59	AvNormal		. 99
	22	7	4	5	7	4	5	2	1	2	5	42	AvNormal		.94
	23	3	3	2	2	1	5	2	4	1	5	28	Moron		. 59
	24	3	5	4	4	5	6	3	4	5	4	23	Moron		.72
	25	5	5	4	3	5	7	3	5	5	4	46	Moron	14	77

### **EDITORIAL NOTES**

For Sale—Eye, Ear, Nose and Throat practice, in a prominent city in a neighboring state. Has been running nearly fifteen thousand dollars a year. The physician has suddenly died and his widow desires to sell his office

equipment to someone who will be competent to take over the practice. This is an excellent opportunity for a competent man, and could be handled with very little cash and a note with approved security. Call or address 1433 South Vermont Avenue, Los Angeles.

- Dr. R. J. Sewall, formerly of Minnesota, has located at Nordhoff.
- Dr. J. Severy Hibben has been appointed city physician of Pasadena.
- Dr. R. K. McGuffin of Imperial is visiting his old home at Point Pleasant West Virginia.

Dr. Frank M. Mikels, formerly of Morris Plains, New Jersey, has located in Long Beach.

- Dr. J. F. Grant, of San Diego, has received his commission as Captain in the United States Army.
- · Santa Barbara is building a new County Hospital, to cost \$50,000. It will be erected near Goleta.
- Dr. Philip S. Chancellor of Santa Barbara is on duty at Camp Kearney, Linda Vista, San Diego County.
- Major C. W. Decker has been placed in charge of the Sanitation at Camp Kearney, Linda Vista, San Diego County.
- Dr. Milbank Johnson is doing valuable work as the Los Angeles member of the State Military Welfare Commission.
- Dr. Herbert E. Bogue who was recently appointed assistant Surgeon at the Soldier's Home, Sawtelle, has reported for duty.
- Dr. F. B. Dwire, of Gardena, is in camp at the Presidio, having received his commission as a lieutenant in the Medical Reserve Corps.
- Dr. C. A. Sanborn, of Riverside, is taking his summer vacation at Needles, where he is the Medical examiner of Draft district No. 3.
- Dr. Henry P. Dulaney, recently appointed chief surgeon of the Soldier's Home, Sawtelle, is a graduate of the Medical College, Tenn.

- Dr. J. Lynn Morris of Santa Barbara has enlisted and received his commission in the United States Army Medical Corps.
- Dr. E. B. Ketcherside from Yuma, Arizona, who has spent some time in Long Beach after a severe paralytic stroke, is now making rapid improvement.
- Dr. Harlan E. Mills has recently located in Lamanda Park and will practice in that community and in Pasadena. Dr. Mills comes from Phoenix, Arizona.
- Dr. E. C. Beach, formerly Los Angeles public school physician has selected by the Government to improve the conditions of neighborhoods adjacent to army camps.
- Dr. T. Elmer Grubbs, age 29, died in Los Angeles, August 24, after six weeks' illness. He had practiced in this city since graduating from the University of Southern California in 1911.
- Dr. Chas. B. Pinkham, Secretary of the State Board of Medical Examiners, announces that 60% of the physicians and surgeons of California have offered their survices to the United States Government.
- Dr. G. A. Broughton who has been practicing in Los Angeles, has returned to Oxnard where he will make his permanent home. Dr. Broughton is an able physician and will be a success wherever he goes.
- Dr. V. O. Adams of Riverside has received his commission as Captain, and Drs. Arthur L. Brown and W. D. Rolph, also of Riverside, have received their commissions as Lieutenants in the United States Army.

There are 4,242,139 motor vehicles in the United States; one automobile or

truck for every twenty-four persons in this country. This is six times the total number of motor vehicles used in all the rest of the world.

Dr. W. L. Ellis, of Calexico, who recently received his commission as First Lieutenant in the United States Army, has been directed to report immediately at headquarters and expects to go to France at an early date.

It is announced that it costs \$10,000 to place a man at the front in France, and for this reason as well as sentimental reasons the Government is doing its utmost to preserve its men from the inroads of venereal and other diseases.

Dr. Frances T. Weed, 52 years of age, a graduate of the University of Michigan, was instantly killed on August 3, by a street car. Dr. Weed came to Los Angeles from Grand Rapids, Mich., and has been practicing here for nine years.

Dr. John P. Gilmer, Police Surgeon of Los Angeles has been undergoing one of those unpleasant grillings that so often come to men who hold public offices. The position of police surgeon has long been too much under the sway of politicians.

Dr. Harry G. Marxmiller of Los Angeles has been commissioned First Lieutenant and has gone to France. Dr. Marxmiller was under training in the Army Medical School at Washington, D. C., for some time before he received his commission.

In Palmdale Antelope Valley at an altitude of 2700 feet, there has been erected a group of small bungalows for invalids and convalescents. These bungalows contain living room, dining room, with one or two bed rooms, bath and kitchenette. Any person interested, address E. H. Davis, Palmdale.

The Mayor of Santa Barbara became incensed at a report sent in from the health officer, C. S. Stevens on Sept. 4th and immediately declared the position vacant. Dr. Stevens graduated from the Medical Department of the University of Minnesota in 1907, and was licensed in California three years ago.

Dr. Byron Stookey, assistant Police Surgeon, who, getting distinction on the battlefield of France in the early stages of the war, has recently received from Surgeon General Gorgas a commission of Captain in the Medical Reserve Corps. Dr. Stookey has been instructed to hold himself in readiness to go to France.

Health officer, Dr. A. E. Banks, announces that the meningitis situation in the San Diego Naval training camp, has much improved and that there have been no new cases since July 19th. 443 have been released from quarantine, as Dr. H. A. Thompson, city Bacteriologist had made thorough laboratory examination.

Santa Barbara, Los Angeles and Ventura Counties are arranging to erect a Tuberculosis Sanitarium in the northern part of Los Angeles County, Santa Barbara and Ventura Counties each to pay \$15,000 towards the construction, and Los Angeles County \$70,000. The State will allow \$3.00 a week towards the support of each occupant.

Dr. J. L. Pomeroy, who resigned his position as County Health Officer of Los Angeles to accept a position as Army Surgeon at Fort Riley, has been forced, on account of ill health, to give up his ambitions to serve his country, and return to Los Angeles. Immediately on his return, the Board of Supervisors re-elected him to his old position.

Dr. F. E. Shine, of Bisbee, Dr. John E. Bacon, Miami, Dr. E. Payne Palmer, Phoenix, Dr. Charles E. Yount, Prescott, have been appointed to a conference by the Fellows of the American College of Surgeons, to be held in Chicago, October 19 and 20. It will consist of 350 surgeons and is to devote its time to laying out plans for the standardization of the hospitals of America.

Dr. Lulu Peters of Los Angeles, Chairman of the Social Hygiene Committee of the Mother's Congress and of Public Health in the Women's Federation of Clubs, advocates a three months training school for marriage. It should be a co-education institution and conducted as any night school for young women. There should be classes in the duties of wifehood, the duties of motherhood, and care of children, including instructions in feeding, discipline and sex hygiene.

The death of Dr. John Adams Colliver, one of the best known physicians in Los Angeles, and widely recognized pediatrist, occurred on August 22nd, at the Angelus Hospital. Dr. Colliver underwent an operation for double Hernia, and gall stones. Double pneumonia supervened, causing his death. He was very popular as a consultant in his specialty, and universally respected by his fellow-practitioners. His funeral was largely attended by members of the profession.

The official report of the State Board of Health shows that during the month of August there were in the city and county of Los Angeles, 1048 births, and 834 deaths. While in the city and county of San Francisco, there were 610 births and 599 deaths. Take the city alone, there were in the city of Los Angeles, 685 births and 502 deaths while in the city of San Francisco,

there were 610 births and 599 deaths. Heart disease was the most frequent cause of death in California, 19.4% of all fatal cases being from that cause.

Dr. William V. Whitmore, of Tucson, has been elected Chancellor of the Board of Regents of the University of Arizona. Dr. Whitmore, who is well known in Los Angeles, has been a member of the Board of Regents for several years. He has also been President of the Arizona State Medical Association, and is one of the leading physicians of Arizona. Associated with him on the Board of Regents is Dr. J. W. Flinn of Prescott, who is also well known in Los Angeles.

In a recent article, Dr. Philip King, Brown of San Francisco, has written a paper on the Patent Medicine Evil, in which he says there are always four parties to the Patent Medicine Evil: The Manufacturer, the Newspaper, the Distributor and the Victim, and also too often the public hospital, and the undertaker. Dr. Brown has written a paper favoring the Kent Bill, which covers the problem of tuberculosis only in its inter-state aspect, and where it concerns people of no means. It offers a small daily government subsidy to tuberculosis Sanatoria applying for it and which are properly run for the care of each non-resident indigent person.

New York State recently had X-ray photographs taken of 1030 members of the 69th Regiment. From the Findings announced on the first 600 plates interpreted to date, there were 22 men, or a fraction of 3 per cent found with definite tuberculosis, sufficient to disqualify them for military service. In addition there were 18 who showed pulmonary lesions, indicating arrested tuberculosis. Seven and one-half hours were required for the making of the

1030 exposures, or 26 seconds per man. Developing the plates by one man took 40 hours, or 2 minutes and 24 seconds per plate. Interpreting the 600 plates was done in 8 hours, or at the rate of 48 seconds per plate.

The funeral services of Dr. Elizabeth Follansbee, conducted by Dr. J. P. Widney, was very impressive. Forty years ago, Dr. Widney was one of the most prominent figures in the Los Angeles profession. He has been ever a student, and for many years, having independent means, has lived in his library. The members of the profession have rarely seen him during these years. As he stood in the pulpit with his long white beard, and his beautiful abundant white hair thrown back from his broad forehead, it made one think of the patriarchs of divine His brief address was intensely religious and was listened to with wrapt attention by all.

The Los Angeles Chapter of Alpha Epsilon Iota held its final meeting and banquet at the Hotel Alexandria recently. Guests of honor were Dr. Eleanor Seymour, national president of the fraternity, and Dr. Alice Johnson Hayes, missionary at Wucho, China.

Members present besides the honor guests were Drs. Veturia Armstrong, retiring president of the local chapter, who presided; Frederika Keep, newly-elected president; Laura Bennett, Charlotte Brown, Lura Emerson, Nannie Dunsmoor, Etta Gray, Nellie Hayes, Elizabeth Kearney, Ethel Leonard, Margaret Morris, Lulu Peters, Louise Richter, Margaret Roberts, Agnes Scholl, Cynthia Skinner, Kate Wilde-Barber, Bell Wood-Comstock, Jula Y. Johnson, Augusta Zuber.

To assist physicians who have enlisted, in getting their leases cancelled, The Rotary Club is going to take a combined appeal to property owners. Those having leases that are burdensome, should address, Chicago Rotary Club, R. R. Deny, Chairman, care of Dennos Food Sales Co. The Chicago Rotary Club has learned that a great number of physicians who have enlisted for service during the present war, are embarrassed by unexpired leases. In certain cases, such corporations from whom they rent have refused to cancel leases. It seems to the Chicago Rotary Club that when physicians are so much needed in the United States Army, every effort should be made to relieve them of contracts rightfully binding in times of peace, but which might better be waived in times of national peril.

The toxic effects of alcohol upon growing protoplasm are well known; and, since experimentation with this is comparatively easy, it has naturally formed the subject of many investigations. One of the most recent is that by Stockard upon guinea pigs. by which it was shown that the net result of twenty-four matings of alcoholized fathers with normal mothers was only five surviving offspring, or no more than might have been expected from a single pairing of two healthy animals; and, further, that at the age of two months, these five survivors were only half the usual size. Dr. E. Bertholet, after a series of microscopical examinations in 120 alcoholic and non-alcoholic human beings was able to demonstrate very clear differences and to assert that "the hurtful influence of chronic alcoholism upon the sexual glands is not to be denied." Similar results have been obtained with other poisons.

Subscribe for the Southern California Practitioner, \$2.00 per year.

### **BOOK REVIEWS**

MUSKETS AND MEDICINE, or Army Life in the Sixties. By Charles Beneulyn Johnson, M.D. Philadelphia: F. A. Davis Company, Publishers. English depot: Stanley Phillips, London, 1917. Price \$1.50 net.

This narrative begins with a young plowman in Illinois, irresistibly drawn toward the great conflict of '61. He enlists, takes active part in several battles, and, because of a natural aptitude in caring for the sick, is transferred to the Hospital Corps, acquiring an intimate acquaintance with the medical problems of that period. The psychology of war time, both in the home and at the front, is ably presented. It is well written—one of those books that it is easier to continue reading than to stop after you have begun.

THE INTERNAL SECRETIONS IN PRACTICAL MEDICINE. By Henry R. Harrower, M.D., Fellow of the Royal Society of Medicine (London); Sometime Professor of Clinical Diagnosis, Loyola University, Chicago; Member of the American Medical Editors Association, etc. Chicago: Chicago Medical Book Co., 1917.

Though still in the prime of life, Dr. Harrower has attained a world-wide reputation through his clinical studies of Endocrinology. His enthusiasm has helped awaken a very justifiable interest in the subject, and we predict for this, his latest book, a demand that will soon exhaust the edition.

PRACTICAL MATERIA MEDICA and Prescription Writing. With illustrations. By Oscar W. Bethea, M.D., Ph.G., F.C.S., Assistant Professor of Materia Medica and Instructor in Prescription Writing, Tulane University of Louisiana; Formerly Professor of Chemistry and Professor of Pharmacology, Mississippi Medical College, etc. Second revised edition. Philadelphia: F. A. Davis Company, Publishers. Price \$4.50.

In this, the second edition, the text has been brought up-to-date, particularly with reference to pharmacopoeial changes. All the official drugs are included and a few that are non-official but in common use. It contains a large number of prescriptions, written above reproach. The text is carefully written and concise, especially well adapted to the requirements of students and those who have recently entered practice.

DIAGNOSTICS AND TREATMENT OF TROPICAL DISEASES. By E. R. Stitt, A.B., Ph.G., M.D., Medical Director, U. S. Navy; Commanding Officer and Head of Department of Tropical Medicine, U. S. Naval Medical School; etc., etc. Second edition, revised and enlarged, with 117 illustrations. P. Blakiston's Son & Co., 1012 Walnut St., Philadelphia.

You know Stitt's Bacteriology? Well, this is a worthy companion volume, devoted to the tropical diseases. It is a veritable multum in parvo, and as reliable as it is condensed.

There is no more striking evidence of advance in general medicine than the present attitude of the physician or rather internist in the diagnosis of the cases met with in a modern hospital ward. Instead of first considering the evidence obtainable at the bedside and then noting the laboratory findings as something apart and entirely subordinate, we now find the two aids to diagnosis so correlated that it is as difficult to note one kind of information as bedside and another as laboratory as it was formerly to separate signs from symptoms in the study of a case. In tropical medicine, however, we have for many years made our diagnosis in the laboratory, the bedside findings serving largely as a control of the laboratory diagnosis.

In this edition, two new chapters have been added to Part I, the section on tropical diseases, one dealing with typhus fever, the other with the spotted fever of the Rocky Mountains.

# MISCELLANEOUS

# DR. ELIZABETH FOLLANSBEE DEAD.

The Los Angeles Express, August twenty-second said:

"Dr. Elizabeth A. Follansbee, prominent clubwomen and first woman physician to open offices in Los Angeles, died early this morning after an illness lasting many months.

"She was born December 9, 1839, at Pittston, Me. After completing her education in the east and in French schools she came to California in 1871 and taught in Miss McDonald's school at Napa.

"Interested in the study of medicine she entered the medical department of the University of California as a member of the first class to which women were admitted.

### Takes Hospital Course

"From California she went to the University of Michigan and entered the senior class November 1, 1875. An opportunity for some excellent observation then presented itself and she left college to take a position in the New England Hospital for Women and Children at Boston, Mass.

"Completing her special course there, she matriculated the following fall at the Woman's Medical college of Pennsylvania at Philadelphia and was graduated in 1877.

"Returning to San Francisco with Dr. Charlotte Blake Brown as a colleague, she organized the hospital there now known as the Hospital for Children and Training School for Nurses, and assumed the post of resident physician.

#### Came to L. A. in 1882

"After practicing six years in the Bay city she was overcome by illhealth and immediately took up her home in Los Angeles in February 1882. The Los Angeles medical profession gave her instant recognition, the first accorded to a member of her sex.

"A member of the original faculty of the University of Southern California, she taught there for twenty-five years. She was also emeritus professor of pediatrics in the Los Angeles medical department of the University of California; an honorary member of the Los Angeles County Medical association and the Daughters of the American Revolution and Colonial Dames.

"Dr. Follansbee was a member of the Friday Morning Club, and in the auditorium of that club house, which has not been used for a like purpose since the beloved Madame Caroline M. Severance was given farewell there, her body will rest this afternoon amid many blossoms.

"Rev. Joseph P. Widney, at 2:30, will conduct the funeral service. Dr. William E. Edwards has been asked by the Medical Society to give the address memorializing Dr. Follansbee. Mrs. Cameron Erskine Thom, president of the Colonial Dames and the D. A. R. Chapter, of which Dr. Follansbee was a member, will be present, together with representatives from various D. A. R. Chapters and other clubs.

"Eight prominent surgeons, all her friends, are to act as pallbearers—Drs. H. G. Brainerd, F. D. Bullard, Walter Lindley, H. Bert Ellis, H. J. Utley, George L. Cole, W. W. Beckett and LeMoyne Wills. The body will be cremated."

#### SCABIES.

Among the cases shown by Hartzell in a skin clinic at the University of Pennsylvania was an example of Scabies. While Scabies is a common

condition it often goes unrecognized and still more often is imperfectly treated. Scabies and pediculosis are the only two itching diseases that may be "caught." Small family epidemics are of frequent occurrence.

Hartzell points out, in the International Clinics for June, that the diagnosis is to be made from the fact that the disease is contagious and that it shows a predeliction for certain regions.

In very young children the palms and soles are often affected. In adults the sides of the fingers, the flexures of the wrists, the anterior axillary folds, the breasts in women and the shaft of the penis in men. An itching desire situated in these regions is almost certain to be Scabies. Close examination will show a few small, dotted, sinuous lines or burrows which are absolutely pathognomonic of Scabies.

Ten or twelve per cent sulphuric ointment is an efficient remedy but is too irritating for infants and young children. Hartzell recommends for the latter equal parts of styrax and olive oil, or one or two drams of balsam of peru to the ounce of vaseline. Whichever remedy is employed it should be rubbed in from the neck to the end of the toes and fingers on three or four successive nights. This should be followed by a bath and then wait for three or four days to see whether the treatment has been successful and to avoid producing a dermititis. If unsuccessful the treatment is repeated. All members of the family must be treated.

To further enhance the rating of Portland, Oregon, the Board of Health is making use of the card system for informing patrons of the cleanliness of the various shops they patronize

A store handling food products of any kind is required to display an "A" card if its sanitation averages 90 per cent or more, as governed by the rules of the Health Board. "B" indicates that the methods of the shop are only up to 80 per cent, and "C" covers anything under 80 per cent.

The card must be displayed in such a place that every patron of the shop may see it, and frequent inspections by officers of the city cause this requirement to be obeyed.

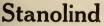
A very noticeable improvement in all shops has been noticed since they have been required to advertise the degree of sanitation they maintain. Each merchant seems to be now anxious to get an "A" rating. Some merchants are advertising the fact that their shops rate approximately 100 per cent clean.

# JAUNDICE WITH ENLARGED LIVER IN A YOUNG ADULT.

(Primary Carcinoma of the Gall-Bladder.)

By Thomas McGrae, M. D., F. R. C. P. An example of this rare condition is reported, in the International Clinics for June, by McGrae.

The patient was a voung man, age thirty years, who entered the hospital because of illness dating back five months. The trouble began with pain in the right side, loss in weight. Jaundice appeared about three weeks after his admission to the hospital. Physical examination showed prominence of the surface veins of the abdomen and fullness in the epigastrium was due to a firm mass with a distinct edge which came within 1 C. M. of the naval in the mid-line. The mass extended to the left beneath the left costal margin opposite the ninth rib. To the right it passed under the right costal margin and in the nipple line is felt below the costal margin on deep inspiration. The mass was smooth and hard and presented no irregularities. The gall-bladder was not felt.



rade Mark Reg. U. S. Pat. Off.

# Liquid Paraffin

(Medium Heavy)

Stanolind

INTERNAL

mente

Tasteless - Odorless -- Colorless

# Before Operation

Stanolind Liquid Paraffin is an ideal laxative for surgical practice.

When used in the proper dose, it thoroughly empties the alimentary canal, without producing irritation of other undesirable effects.

It is particularly valuable in intestinal surgery, because it leaves the stomach and bowels in a quiet state, and because its use is not followed by an increased tendency to constipation.

After an abdominal operation, one or two ounces of Stanolind Liquid Paraffin may be given through a tube while the patient is still under the anaesthetic, or as an emulsion, an hour or two later.

Stanolind Liquid Paraffin is essentially bland in its action, causing a minimum amount of irritation while in stomach or intestine. It may also in most cases be gradually reduced without apparently affecting the frequency of the evacuations.

A trial quantity with informative booklet will be sent on request.

Standard Oil Company

(Indiana)

72 W. Adams St. Chicago, U. S. A.

74h

As active anti-syphilitic treatment had been tried before his admission to the hospital and the Wassermann test was negative, syphilis was ruled out. A moderate nucocytosis was present and the red cells slightly reduced in number.

After considering the various conditions which might account for the tumor mass, loss of weight, jaundice, etc.. the diagnosis was correctly made by exclusion. The conditions considered were: Hyperthropic biliary cirrhosis of Hanot: Syphilis; portal cerrhosis; abscess, cholangeitis, angiocholitis and neoplasm. The latter seemed the most probable diagnosis. This was confirmed by an exploratory operation and later by autopsy.

The majority of the cases of primary carcinoma of the gall-bladder are associated with gall stones, the figures varying from 75 to 100 per cent. The case reported belongs to the exceptions.

### SKIN GRAFTING.

### By Arthur M. Shipley, M. D.

In a well illustrated article, in the International Clinics for June, Shipley describes the excellent results he has obtained in the treatment of chronic leg ulcers by the use of skin grafts. He employed the method described by John Staige Davis in the Journal of the American Medical Association, September 19, 1914.

Shipley reports eight cases of the obstinate type of leg ulcer in which complete success was obtained.

He recommends this method for the following:—

First, the ease and the simplicity of the procedure.

Second, its uniform success if the proper precautions are taken in the preparation of the surfaces and the application of the grafts.

Third, the robust surface that is formed by the graft.

Fourth, the fact that the operation

can be done without a general anaesthetic.

Fifth, the very rapid and remarkable filling up of the base of the ulcer to the level of the surrounding tissues.

The method is not available on an exposed surface like the face, unless the grafts are closely placed, otherwise the resulting surface has a spotted appearance.

War Department, Office of the Surgeon General, Washington.

August 9, 1917.

The Editor, Southern California Practitioner, Los Angeles, California.

Sir: A cony of the Southern California Practitioner has been forwarded to this office by Capt. J. MacDonald, jr., Medical Reserve Corps, of the American Journal of Surgery, 92 William St., New York, N. Y.

The Surgeon General directs me to express his appreciation of the work that is being done by the medical press on behalf of the Medical Department of the Army, and to thank you for the aid which you are rendering us.

Sincerely,

Robt. E. Noble, Major, Medical Corps, U. S. Army.

# X-Ray Laboratory

Special attention paid to

Radiography of the Chest and Gastro-Intestinal Tract

X-RAY DEPARTMENT of the CALIFORNIA HOSPITAL



Vol. XXXII.

LOS ANGELES, OCTOBER, 1917

No. 10

Editor, DR. GEO. E. MALSBARY.

Associate Editors,
Dr. Walter Lindley, Dr. W. W. Watkins, Dr. Ross Moore, Dr. George L. Cole,
Dr. Cecil E. Reynolds, Dr. William A. Edwards, Dr. Andrew W. Morton,
Dr. H. D'Arcy Power, Dr. B. J. O'Neill, Dr. C. G. Stivers, Dr.
Boardman Reed, Dr. W. H. Dudley, Dr. J. M. Mathews.

## X-RAYS IN DISEASES OF THE STOMACH AND INTESTINES.

BY GEO. E. MALSBARY, M.D., RADIOLOGIST AT THE X-VAY DEPARTMENT OF THE CALIFORNIA HOSPITAL, LOS ANGELES.

In Roentgen's careful and thorough presentation of his discovery in December, 1895, the statement is made that the salts of metals, either solid or in solution, behave generally as the metals themselves, in obstructing the passage of the X-rays. In the following February Dutto (Rendiconti, Reale Accademia dei Lincei, 1896, v, 129) demonstrated the possibility of rendering hollow organs visible by injecting them with salts, presenting roentgenograms of arteries filled with plaster of Paris. In March, 1896, Becher (Deutsche med. Wochenschrift, 1896, xxii, 202) published a roentgenogram of a dead guinea-pig in which he had filled the stomach and part of the small intestine with lead subacetate, a loop of the small intestine showing distinctly, the stomach outline less distinct. In April, 1896, Wegele (Deutsche med. Wochenschrift, 1896, xxii, 287) suggested making a radiograph of a spiral electrode introduced into the stomach, to determine the limits of the greater curvature, and this was carried out about a year later by Lindemann

(Deutsche ined Wochenschrift, (xx)ii, 266); who radiographed a fine copper wire introduced into the human stomach through a stomach tube, showing it lying along the lower gastric Hemmeter (Boston Medical and Surgical Journal, 1896, exxxiv, 609) proposed filling the intragastric bag, which he had recently devised with a solution of lead acetate, to permit showing the shape of the stomach on the radiograph. Cannon began some physiologic experiments on deglutition in the fall of 1896 (American Journal of Physiology, 1904, xii, 388), using subnitrate of bismuth and later sulphate of barium. During these studies gastric peristalsis was observed and a preliminary report was made by Bowditch (Science, June 11, 1897, p. 901), under whose direction the experiments had been carried on. Rumpel reported (Munchener med. Wochenschrift, April 20, 1897, xliv, 420) using 300cc. of a five per cent solution of bismuth subnitrate to permit x-ray observation of pathologically dilated esophagus. Roux and Balthazard (Compt. rend. Soc. de biol., June 18, 1897) used food mixed with bismuth subnitrate in studying peristalsis in the frog, and later in studying the stomach movements in the dog and in man. They (Compt. rend. Soc. de biol., 1897, xvii, 567, 704, 785; Arch. de physiol., 1898, xxx, 85) gave to the human subject 15 or 20 gm. of bismuth subnitrate suspended in 100cc. of water, and were the first study peristalsis of the human stomach in this way, though they succeeded in seeing only the lower part of the greater curvature. Observations on the movements of the stomach in cats was published in the American Journal of Physiology (1898, i, 13, 259; 1902, vi, 251; 1904, xii, 387), the work being done in the Harvard Laboratory by Moser and Cannon under the direction of Bowditch. Moser and Cannon (Amer. Jour. of Physiclegy, 1898, i, 12, 425) used capsules of subnitrate of bishuth and boluses of the salt mixed with bread and milk mush and also a suspension of the salt in water, in studying deglutition in a girl aged seven years. Williams and Cannon studied changes in the stomach as it empties in 1898 and 1899, the subjects being a boy of ten and his sister of seven years. Fluorescent tracings were made on transparent paper, showing the vertical position of the stomach and a gradual shortening of the organ as it discharges its contents (Williams, Francis H.; Roentgen rays in Medicine and Surgery, New York, The Macmillan Company, 1903, page 365). (Fortschr, a. d. Geb. d. Roentgenstrahlen, 1905, viii, 141) published his thorough studies of the alimentary canal in man about a year later, in which he described his use of subnitrate of bismuth to render the food mass visible in the stomach and intestines. This is often spoken of as Reider's method, though Rieder did not claim originality for it.

We have long been familiar with the toxic effects of intestinal stasis, so ably described as auto-intoxication by Bouchard. The anatomical changes in these cases, especially the relaxation and thinning of the tissues, notably the muscular and fibrous connective tissue, were well described by Glenard and have since been known as Glenard's disease. Thus we came to recognize as a single disease the numerous ptoses, such as gastroptosis, enteroptosis, nephroptosis, hepatoptosis, and the various uterine displacements due to the same cause. Sir Arbuthnot Lane showed that the enteroptotic symptoms and the metabolic symptoms are dependent upon, intestinal auto-intoxication, and that a great many diseases may be caused this directly or indirectly through the lowering of the bodily resistance. Thus was afforded ar explanation of the origin of many cases of chronic arthritis including the rheumatoid arthritis known as arthritis deformans. Here is at least one explanation of the constitutional factor recognized by the older clinicians as the predisposition to tuberculosis. Most causes of dyspepsia and chronic indigestion may be ascribed to intestinal stasis. There is usually abdominal distress in some degree, though in many cases there is little or no discomfort in the abdomen, and it is not uncommon for the patient to have become so accustomed to any tenderness there may be present that it is not complained of. The cases are often marked by constipation alternating with diarrhoea, depression of spirits, lack of energy, and general nervous instability. The appetite varies, is capricions; there is often a bad taste in the mouth, a bad color, a bad breath, a bad odor and a bad temper. The patient suffers a multitude of various aches, especially headache, muscle and joint aches.

The causes of intestinal stasis are

supported parts of the alimentary tract may produce obstruction, especially where they join the more firmly attached parts. Adhesions produce many obstructions. A mobile cecum in conjunction with a normally fixed ileum may cause obstruction at the ileo-cecal junction. A ptosis of the transverse colon into the pelvis may cause stasis even in the absence of adhesions, through kinking of the bowel at the hepatic and splemic flexures. Such eases may often be satisfactorily reieved through mechanical support without appeal to surgery. Inveterate ases may require fixation of the transverse colon. In practically all cases t is essential that the diagnosis shall e made after a thorough x-ray examnation both roentgenoscopically and oentgenographically, and the treatnent should be controlled by the x-ray indings, the examinations being made s often as is necessary to follow the progress of the case. To try to stint he x-ray work is unjustifiably poor conomy in these cases. Probably all ases are at first amenable to medical reatment, though a large proportion nay be cured only by surgery when hey finally come under observation. The frightful popularity of physics and laxatives is but an index to the general prevalence of intestinal stasis. Continuous drugging and abnormal imitations of diet are incompatible vith real health. Occasionally drugs and special diets may be indicated, but hey should not be used as routine neasures nor too long continued. The formal body does not require corsets r abdominal supports, but there may be abnormal conditions that may be hus relieved. Such supports should be used for definite indications, and in uch manner as to accomplish the puroose for which they are required. They nay do harm as well as good unless

numerous. Ptosis of various poorly

properly used. Exercises properly adapted to the individual are of very great value, but are not safe as a routine measure. These cases afford a vast field for the intelligent selection of the various medicinal and non-medicinal tonics. Their real good probably comes largely through the restoration of tone to the relaxed and thinned muscular and connective tissue supports of the ptosed organs and of the intestinal wall. The range of useful agents of this type extends all the way from the bitter tonics to surf bathing. Their proper selection requires no little discrimination. The beneficial effects of the bitter tonics in intestinal stasis has contributed largely to the financial success of many widely advertised nostrums of simple composition and extravagant claims. The neurologists have recognized the value of strychnia in arthritis deformans, and have therefore been inclined to claim that disease in their specialty. Its real value in such cases depends upon its tonic effect relieving intestinal stasis, to which the arthritis deformans is due. A rational consideration of the remedial agents that may be used in intestinal stasis, might well occupy a commodious volume. Suffice it to say that any treatment should be carefully followed and checked up by the use of the x-ray.

On Sept. 15, after a long trial, Mrs. Harriet James, of Fresno, was awarded \$64,000 in her \$100,000 damage suit against the Bowman Drug Company, Campbell Electric Company, and others, because of the accidental death of her husband, Dr. Clement James, a year ago last April. Dr. James took a mixture to outline his stomach for an X-ray picture. Barium carbonate was administered in place of barium sulphate and the dentist died. The agent for the X-ray Company claimed the mistake was made by the druggist.

### OBSERVATIONS DRAWN FROM AN EXPERIENCE OF TWENTY-TWO THOUSAND SURGICAL ANAESTHESIAS.

BY FLORENCE HENDERSON, R.N.

In a series of twenty-two thousand surgical anaesthesias, a number of things of practical importance have been observed. While each method and every anaesthetic has its enthusiastic advocates, it is obvious that no method now employed can be honestly styled ideal. The very fact that so many novelties are competing for popularity is a proof of the absence of a thoroughly satisfactory anaesthetic. When an anaesthetic is found which will produce a rapid narcosis, easily brought about followed by a quick return to consciousness with no ulterior and troublesome .sensations and without danger to life, we may feel that the ideal has been reached.

Our experience has been that the simpler the anaesthetic the better; consequently we do not employ any of the various combinations of gas-oxygen, gas-oxygen-ether, chloroform-ether, etc., but use ether by the drop method. We feel that this is the safest routine method, and that, in the hands of the experienced anaesthetist it more nearly reaches the ideal than any other anaesthetic or combination known at the present time.

A patient who is in condition to take any general anaesthetic, can take ether. When ether is contra-indicated local anaesthesia should be employed. If necessary, local anaesthesia can be used for almost any kind of an operation. With the introduction of novocain and the development of technique, its field of usefulness has been greatly increased.

With ether given by the drop method, by an experienced anaesthetist a comfortable induction of unconsciousness may be secured with an equally comfortable recovery. To accomplish this, the stage of excitement must be eliminated and the amount of ether introduced into the system reduced to the minimum.

Anaesthetists know that the drugs which they handle are very powerful poisons and that while a death may not occur on the table or later by the faulty administration of the drug, the convalescence may be seriously retarded. The object of the anaesthetist should be to obtain a satisfactory surgical anaesthesia without the consumption of an unnecessary amount of the drug by the patient and not seeing how much the patient will stand without killing him. Each patient should be treated as though he were a bad risk and given the same care and attention that is given to the one who is known to have serious organic lesions. Because a patient is in good condition and will stand almost any kind of treatment and still recover, is no reason why he should not have the benefit of a small dosage of anaesthetic carefully administered.

In the field of major surgery, the post operative picture is to a marked degree overshadowed by the symptoms resulting from the surgical procedure itself and the post anaesthetic conditions are not clearly differentiated.

The "Drop Method" has been described so many times that it is unnecessary to repeat it. There are, however, a few points which might well be emphasized. Many times the "Drop Method" is drop in name only. The mask is so thickly covered with gauze and ether is poured instead of dropped, rendering the method essentially a closed one. There should always be sufficient air with the ether to keep

<sup>\*</sup>Read before the Los Angeles County Medical Society, June 14, 1917.

the color pink and the ether should be dropped continuously with a regular drop, rather than a large amount poured upon the mask and discontinued until the patient begins to come out. Only by giving the ether steadily can a smooth narcosis be maintained.

Many difficulties encountered in the administration of an anaesthetic may be averted if the anaesthetist constantly bears in mind that all it is necessary to do is to render the patient unconscious and keep him in that state. It is true that the skill of the anaesthetist may be taxed in many cases, for each individual is different and the physical condition and temperament of the patient has much to do with the ease or difficulty with which anaesthesia can be induced and the patient carried through the operation.

One common error of the inexperienced anaesthetist is that of trying to hurry the anaesthesia. This not only delays narcosis, but the concentrated ether vapor is apt to cause laryngeal spasm. This in turn produces congestion, followed by swelling of the parts, with more obstruction, asphyxiation and rigidity. Muscular rigidity is frequently a result of too much rather than too little ether.

Too much stress cannot be placed upon the handling of the jaw. As soon as the patient is sufficiently relaxed the head should be turned to one side, the jaw brought forward and up and held continuously in this position. With some patients it is advisable to maintain an oral air way and for this purpose we have found the Connell tube to be useful. Care must be taken at all times to avoid obstruction of the air passages.

In septic cases, where there is a toxic condition of the blood and the anaesthetic is not readily taken up, there is danger of overcrowding the anaesthetic in attempting to rush the ether and, by faulty administration or error in technique, cause serious difficulties. Too rapid administration of ether is also responsible for mucous with which we are sometimes troubled. Swabbing the throat will be of little assistance in ridding the patient of it. Keeping the jaw up and allowing a liberal supply of air will usually relieve the condition.

It is not always an advisable procedure to attempt to abolish all grunting and irregular breathing during operations upon the gall bladder and upon the intestines when there is traction upon the mesentery. The close proximity of the gall bladder to the diaphragm and traction upon the mesentery are responsible for the difficulties and to crowd the anaesthetic to a degree, which will abolish them, may produce a dangerous concentration of ether.

Patients with intestinal obstruction must be handled with the greatest care and many times it is advisable to use a local rather than a general anaesthetic. If the latter is employed, the stomach should be washed prior to the induction.

In spite of this precaution, the manipulation of the intestines by the surgeon may force some of the stercorraceous contents into the stomach, which may without warning pour out of the mouth. For this reason the patient should not be deeply anaesthetized for when this occurs the sudden outpouring of fluid may drown him. The patient should be lightly enough under the anaesthetic so that this may be avoided.

Unless the heart is badly damaged, with marked dilatation, ether can usually be safely employed in operations upon the thyroid. On account of the difficulties with the respiration, which may arise from distortion of the trachea by the goiter, it is advisable to carry the patient under a light degree of

anaesthesia. With the cooperation of the surgeon and anaesthetist, most thyroid operations can be conducted under analgesia. It has been found by surgeons with a large experience in surgery on the thyroid that one sixth grain of morphine and one one hundred fiftieth grain of atrpine given about thirty minutes before operation to a thyroid patient helps to ally the nervousness and does away with the mucous, which would otherwise be present, due to the manipulations about the trachea. The ether should be given very slowly with plenty of air and discontinued at the earliest possible moment so that the patient is awake at the close of the operation.

It is obvious that the more we mitigate the post operative gastric, bronchial and renal irritation from an anaesthetic the greater will be the relief from suffering. Vomiting during anaesthesia is seldom met with if the narcosis is kept even by the regular drop. By careful observation of the patient the anaesthetist will we warned of impending vomiting by the patient swallowing. Anaesthesia can be deepened and vomiting avoided. Post operative vomiting today has become almost a thing of the past, certainly as a persistent event.

In certain badly afflicted pulmonary cases, ether is not only tolerated but appears to have quite a specific beneficial effect. Nearly twenty years ago Mikulioz reported that he had seen more pneumonia follow local than general anaesthesia. The pulmonary complications which we have seen have usually followed laparotomies and more often in patients with operations upon the upper abdomen and seldom seen following operations upon other parts of the body. This has been accounted for by the fact that peritoneal infections can be carried to the lungs by embolic infractions and by the lymph vessels. For a few days following an abdominal operation, a patient usually does not breathe deeply on account of the pain, which respiration causes in the wound. Thus only the upper part of the lungs is ventilated. If the patient has had a recent cold or bronchitis it is easy for pneumonia to develop on account of the lack of lung expansion. There have been more pulmonary complications following operations for carcinoma of the stomach than any other class of cases in the Mayo Clinic and the autopsy has shown in most of these fine metastatic growths in serial sections of the lungs. The ananesthetic can hardly be held responsible for such a complication.

Rovsing proved that while ether causes an increased salivation in the salivary glands the air passages the larynx, trachea and bronchi, were not irritated even when animals were killed by introducing ether through a trache-otomy tube. Therefore his conclusion was, that the only way in which an ether narcosis can cause a phneumonia is by the aspiration of the accumulated saliva in the throat.

At the close of an operation, the gown of the patient is often wet from perspiration. The anaesthetist should see that the patient has a dry gown before leaving the operating room and that he is well covered, as there is danger of pulmonary complications due to the patient becoming chilled when taken through the corridors and on the If the patient has been elevator. troubled with mucous during the anaesthesia or there has been any evidence of bronchial irritation, dry heat applied over the chest, when the patient is returned to bed, is a wise precaution. During recovery from the anaesthetic the patient should be kept warm, as the bodily resistance is lowered, but there should be plenty of fresh air in the room.

In our experience, we have not found shock to follow light ether anaesthesia, but on the other hand have observed that the after effects are reduced to the minimum when patients are carried lightly. The greatly diminished shock makes for a speedier convalescence. If the surgeon would always handle the patient as gently when under an anaesthetic as when he is not, the amount of anaesthetic would be reduced. Rough handling requires a deeper stage of anaesthesia than gentle.

The first aim of the anaesthetist should be to gain the confidence of the patient. It is seldom that the patient who knows his anaesthetist and has confidence in him, causes any trouble. Suggestion is a most valuable aid in the securing of a rapid, comfortable narcosis. The patient should have the benefit of this important assistance and everything should be done to promote the proper suggestion. No detail which will make for the comfort and ease of the patient should be disregarded. The room in which the anaesthetic is administered, preferably the operating room, should be quiet and well ventilated. Needless conversation should be avoided. The patient should never be hurried but impressed with the idea that everything is being done for his comfort. Patients usually appreciate having the anaesthetist talk to them and anticipate the stages of the anaesthesia by describing them as they appear. When in the subconscious state, the mind is very susceptible to suggestion and by offering the correct suggestion the patient is assisted materially. The anaesthetist must be governed in his choice of suggestion by the personality of the patient and endeavor as nearly as possible to suit the suggestion to the peculiarities of the patient. Encouragement and praise stimulate most patients to do their best. The personality of the anaesthetist means a great deal. Confidence in his own powers will produce a like feeling of confidence in the patient. By his personal influence he is able to allay the patient's fears and anxieties and assist him to pass into unconsciousness with but little if any discomfort.

It is only necessary for the anaesthetist to pay sufficient attention to the operation to know when to increase or decrease the amount of ether and when to discontinue it. This can usually be told from the conversation of the surgeon. The anaesthetist cannot expect to do satisfactory work and at the same time learn to do surgery.

The amount of ether required for an operation varies with the different patients, the kind and length of operation. The anaesthetist should see that the patient does not receive one drop more than is necessary and the dose should be regulated the same as any other drug. The patient, who has the least amount of anaesthetic, consistent with the work of the surgeon does better than the one who has an over There are times when the amount of ether can be decreased in some cases. In gastric and intestinal operations after the explorations have been made, and when there is no traction upon the mesentery or parietal peritoneum very little if any ether is required. At the close of the operation, the patient will need a deeper anaesthesia as there is pain when the bowels are replaced and the peritoneum is closed.

In many instances, the anaesthetist is in a more difficult and dangerous position than the surgeon and for the welfare of the patient it is necessary that there be skill on the part of the anaesthetist, no less than on the part of the surgeon. Many times a physician who would not attempt to do a serious surgical operation, will assume

the equally serious responsibility of giving the anaesthetic.

To secure the best results, there should be cooperation between the surgeon and the anaesthetist. The surgeon must have confidence in the anaesthetist so that he does not feel that he need divide his attention between the operation and the narcosis.

While the anaesthetist should warn the surgeon if the patient is not doing well and not assume undue responsibility, the surgeon should be relieved of the responsibility of the anaesthesia and be able to give his undivided attention to the operation. If the surgeon knows that his anaesthetist is paying strict attention to the narcosis and will warn him if the patient is not doing well he can work with more ease and rapidity.

The surgeon, who appreciates that nothing is gained by haste, when a patient is not relaxed and who is willing to wait a few minutes if necessary until satisfactory relaxation is secured and whose manipulations are gentle, usually has good anaesthetics. When things are not going smoothly with the anaesthetic, the conscientious anaesthetist is doing his best and will be able to handle the disagreeable situation in a more satisfactory manner if the surgeon is patient. The anaesthetist's reputation is at stake and it is nothing to his credit to have the patient not do well. If he did not have the welfare of the patient in mind and was prompted by nothing more than a selfish motive he would do his best.

It is realized more and more not only by the Medical Profession but by the laity, that anaesthetists with special training are necessary for safety. Inexperience, ignorance and carelessness are responsible for most of the accidents in connection with anaesthetics.

The work of the anaesthetist is an

interesting one and one in which there is always room for improvement. There is no opportunity for the anaesthetist to become conceited for the larger the experience the more certainly does he realize his limitations. The aim should be to become more skillful in the administration of the drugs, more careful in watching the patient and in conserving the patient's vitality.

With more skilled anaesthetists, who are devoting their entire attention to this work there will be fewer patients who have a horror of that part of the operation, convalescence will be hastened and there will be fewer fatalities due to the anaesthetic.

3035 Leeward Avenue.

#### KEEN APPRECIATION.

Keen, with his usual acute insight, declares in the sixth volume of his Surgery, that "The dignity and standing of the physicians directing the X-ray departments of hospitals should be on a par with the heads of other clinical departments. The mere fact that the X-ray apparatus can be operated by an uneducated person with apparently good results should not deceive us into thinking that the interpretation of the pictures can be as easily accomplished . . . . When we consider that the data furnished by the X-ray are always accurate, and that the interpretation only offers a chance for error, we realize the importance of looking for the interpretation from a person whose fundamental knowledge of anatomy, physiology, pathology and clinical medicine is of the best. . . . . The radiograph is, in reality, one of the simplest and most absolute of clinical tests. When errors are made in interpretation, they are wholly due to the ignorance or defective logic of the interpreter. The roentgenologist must not only know surgical anatomy and physiology, but X-ray anatomy and X-ray physiology as well."



A MEDICAL, CLIMATOLOGICAL AND SOCIOLOGICAL MONTHLY MAGAZINE. This journal endeavors to mirror the progress of the profession of California and Arizona.

Established in 1886 by Walter Lindley, M.D., LL.D. DR. GEORGE E. MALSBARY, Editor and Publisher.

Associate Editors,

Dr. Walter Lindley, Dr. W. W. Watkins, Dr. Ross Moore, Dr. George L. Cole, Dr. Cecil E. Reynolds, Dr. William A. Edwards, Dr. Andrew W. Morton, Dr. H. D'Arcy Power, Dr. B. J. O'Neill, Dr. C. G. Stivers, Dr. Boardman Reed, Dr. W. H. Dudley, Dr. J. M. Mathews.

Address all communications and manuscripts to

EDITOR SOUTHERN CALIFORNIA PRACTITIONER,

Subscription Price, per annum, \$2.00. 1414 South Hope Street, Los Angeles, Cal.

### EDITORIAL

### RAW EGGS OBJECTIONABLE AS A DIET.

The leading editorial in the Journal of the American Medical Association for September 22nd, combats the idea so generally adopted that raw eggs are very easily digested. The article quotes from Bateman, who cites numerous instances to show that raw eggs may cause diarrhoea and vomiting, and that the utilization of the whites in the human alimentary tract is often found to be as low as 50%. Heating to 70 degrees centigrade (158 F.) removes the partial indigestibility and puts the white of egg into the category of readily assimilable nutrient.

Various considerations now make the popular advocacy of raw eggs seem inadvisable. Bateman has summarized the problem as follows: A substance which fails to stimulate a flow of gastric juice and is antipeptic, which hurries from the stomach, calls forth no flow of bile, and strongly resists the action of trypsin, which is poorly utilized and may cause diarrhoea, has

evidently little to recommend it as a toodstuff of preference for the sound person, let alone for the invalid. And when the native protein need only to be coagulated at 70 C. in order to obviate almost all the effects mentioned, there appears to be still less reason for using it uncooked. This does not mean, of course, that raw eggs is toxic in the correct sense of the word. The reputed relation of excess of egg white to renal damage and the frequent occurence of hypersensitiveness to its proteins offer additional reasons for debating the wisdom of a liberal use of raw eggs.

### MINNESOTA GETS MAYO FORTUNE

The board of regents of the University of Minnesota have ratified by unanimous vote the permanent agreement making the Mayo foundation at Rochester the property of the university to be used perpetually for medical research. Securities totaling \$1,650,344, representing the fortunes of Drs. Will

J. and Charles H. Mayo, were turned over to the university.

"We turn over the bulk of our savings," said Dr. Will J. Mayo, who is a member of the board of regents, but who did not vote on the proposal. "The money came from the people and we feel it should return to the people—a continuing fund that shall serve this state for generations to come."

It was announced that one of the Mayos would go to France with recruits next year and that they would take turns there until the end of the war.

### MALTED MILK.

The various preparations advertised as malted milk have long been exploited as furnishing all that is required in the diet of infants, and as of very great value in convalescence. In view of the high cost of living coupled with the necessity of furnishing rations for an unprecedented number of men in military service, it might not be amiss to call attention to the true value of the so-called malted milks. In the first place, so far as we know, there is no malt in any of these preparations. Secondly, the amount of milk they contain is problematic. In fact, they consist largely of maltose, a form of sugar. So that in the feeding of infants, the so-called malted milks should be compared with other forms of sugar. in which case preference would be given milk sugar. And in the feeding of our military men, other forms of sugar would probably be preferable. Less confusion would arise if these preparations were advertised as impure crude maltose. Their chief value seems to be money making for their exploiters.

### EDITORIAL NOTES

Dr. W. A. Lofland, formerly of Lafayette, Ind., has located in Whittier.

Dr. W. W. Crawford, has been appointed health officer, of the city of San Diego.

Dr. M. M. Morrison, who spent two years in the trenches, has opened offices in Hollywood.

Dr. David Bell who lives in Lynnword has a branch office at 131 Pine Ave., Long Beach, Cal.

Dr. R. J. Sewall of Ventura has received his commission as captain in the Medical Reserve Corps.

Dr. John Nutall of Ocean Park has been chosen as senior assistant surgeon at the Soldiers' Home.

Harvard Medical School and the College of Physicians and Surgeons of Columbia University are this year admitting women on an equal footing with men.

Dr. Philip S. Chancellor, of Santa Barbara, has been appointed chief of the Army Hospital in San Diego.

Dr. William S. Wilcox, of Alhambra, has removed to El Monte where he is associated with Dr. S. L. Corpe.

Dr. A. B. Hromadka, of Sawtelle, has been commissioned as Lieutenant in the U. S. Medical Reserve Corps, and has gone to the front.

The trial of Dr. R. S. Lanterman, on the charge of killing Mrs. Regina Evans, through malpractice, has been set for December 3rd, 1917.

Dr. Helen H. Woodroofe has gone to France to take up Red Cross activities. She has been secretary of the Santa Monica Red Cross chapter since its organization.

Dr. Ross Moore has received his commission as Major, in the Medical Department of the United States Army, and has left for Fort Douglas.

Dr. E. C. Moore, of Los Angeles, is on his way to France, having joined the Medical unit of 200. God bless our patriotic young men and bring them safely home!

Dr. Francis M. Pottenger, the head of the Pottenger Sanatorium, and Miss Caroline M. Lacy, of Pasadena, were married at the home of the bride, September 15, 1917.

With Dr. T. Percival Gerson launching a world wide campaign of birth control, and the Kaiser's War killing millions, it looks as though the population of the world might be permanently reduced.

The U. S. Government has decided to establish a hospital for the treatment of those who return wounded from the front in Europe. The object of the treatment is to reconstruct them for work in private life.

It has been announced that Dr. Mayo will have charge of the Base Hospital at Camp Kearny, Linda Vista, San Diego County. As to whether it will be Charles or William Mayo, there has been no announcement.

Dr. John J. Kyle, who has been doing a great deal of examining for the army here in Los Angeles, has received his commission as Major, and is now in charge of the department including his specialty at the Base Hospital, Camp Lewis, American Lake, Wash.

The Southwestern Tuberculosis Conference of the National Association, for the Study and Prevention of Tuberculosis, will be held in the Grand Canyon of Arizona, October 22 and 23. Dr. W. Jarvis Barlow of Los Angeles is President.

The war is making a great change in the personnel of the medical profession all over the Union. In Los Angeles it is taking away many of our best physicians, surgeons, and specialists. May they all return soon and safe, is the earnest prayer of their many friends.

Dr. Rea Smith who has been under orders to prepare a unit for the care of 250 beds, has received orders to prepare for double that number, or 500 men. It did not take him but a short time to secure the additional surgeons, nurses, and money necessary.

Dr. G. A. Fielding of Santa Monica has received his commission as captain in the Medical Corps of the United States Army. Dr. Fielding began his medical career as residence physician of the California Hospital. He was afterwards surgeon at the Soldiers' Home, and is held in high esteem as a physician and citizen.

Dr. Benjamin M. Page, age 74 years, who graduated from the College of Physicians and Surgeons, New York, 1864, died at his home in Pasadena on September 17, 1917. He was a prominent practitioner in Cleveland, Ohio, but retired and came to Pasadena in 1887, where he had since resided.

Dr. H. A. Thompson, city bacteriologist of San Diego, who was recently stricken with pneumonia which followed a breakdown as the result of overwork during the spinal meningitis epidemic at the naval training camp, sent his resignation Sept. 14th, 1917, to Mayor Wilde.

Dr. Thompson, who has made a remarkable record in his position as city bacteriologist, recently was commissioned an assistant surgeon in the United States Navy and has been stationed at the naval training camp at Balboa Park.

Dr. Thompson has held the city position for eight years and has done much notable laboratory work.

The Red Cross throughout the U. S. has organized committees on civilian

relief. The scope of this work is to provide financial relief, medical attention, and legal advice for the family left by a husband, father, or son, going to war. The committee in Los Angeles has as chairman, Mrs. Benjamin Goldman.

Dr. Maximilian Kampmann, a physician at Hollywood, was recently arrested as a suspected spy, and is in jail in Los Angeles. He is a comparatively young man, who had made himself quite popular in this section. No one is allowed to converse with the prisoner, and federal officials will not discuss his case.

Prof. Charles Richet of the French Academy, Nobel prize winner for medicine in 1913, declared before the academy that typhoid fever, which claimed many victims at the beginning of the war, has now been virtually eradicated from the army through vaccination with the serum discovered by Dr. M. A. Vincent of the Val de Grace Military Hospital.

Dr. W. M. Kendall, health officer of Venice, infected himself while dressing a wound about a month ago, and the infection resulted in a large carbuncle. It was found necessary to operate on him twice, and for several days his condition was serious. The Doctor, we are happy to say, has, since the last operation, improved very rapidly.

Dr. C. C. Park, a wealthy retired physician of Santa Barbara, is locating a hospital in France, paying all of the expenses from his own personal funds. He has two sons now in the American Army, one being at Camp Lewis, and the other in the Officers Reserve Camp at Tanforan. Within a few days, his wife and daughter, who are still in Santa Barbara, will follow him to France. The hospital will be devoted to convalescents.

At a recent meeting of the Ventura County Medical Association, Dr. A. II. Peek of Oxnard read a paper on—"The Use of Gas and Oxygen in Obstetrics." Preceding the paper the members of the association enjoyed a dinner at the Pierpont Inn. In harmony with the action of many other medical associations, the Ventura physicians agreed to take care of the patients of physicians in the Army and give them about 50% of their receipts.

The Board of Supervisors of Los Angeles County have selected the 154 acres, ranch of John T. Wilson in the San Fernando Valley as the site for the new Tuberculosis Hospital. The constructing of the hospital building will begin next January. In the beginning there will be quarters for 220 patients. The establishment will cost \$100,000. Of this amount the County of Los Angeles will pay \$75,000, Santa Barbara and Ventura Counties will each pay \$15,000. Out-of-door life is the basis of the plan and patients if able will assist in the cultivation of the lands.

An evening garden party, recently featured the opening meeting of the Medical Fratenity Alpha Epsilon Iota, with Dr. Charlotte M. Brown and Dr. Olga M. McNeile as hostesses in the spacious grounds of the latter's home, where the long tables were spread beneath a natural bower of shrubbery.

Members present were: Drs. Julia T. Johnson, Elsa Hartsmann, Augusta Zuber, Louise M. Richter, J. Margaret Roberts, Marcia Patrick. Margaret M. Morris, Mary Noble, Lulu H. Peters, Elizabeth Kearney. Fredericka A. Keep, Nellie S. Haynes, Lura B. Emerson, Etta Gray, Nannie C. Dunsmoor, Isabel Crowel, Laura B. Bennett, Veturia C. Armstrong and Elenor Seymour.

Twelve thousand five hundred dollars is the fee Dr. George L. Cole was awarded in Superior Judge Monroe's court October 5th for attending the late Mrs. Susanna B. Wolfskill of Pasadena, during her last illness, and amputating

one of her limbs. Prior to her death, which occurred January 4, 1916, Mrs. Wolfskill gave Dr. Cole a note for \$12,500, made payable one year after date. Yesterday's court action was to secure judgment on this note, together with interest and attorney fees, Judge Monroe instructed the jury to return a verdict for the plaintiff, without leaving the jury box, in the sum of \$14,770.83—\$12,500 the face value of the note, \$1670.83 interest and \$600 attorney fees. Administrators of the woman's estate were the defendants to the action.

The following were elected members of the Los Angeles County Medical Association at the meeting held July 16, 1917:

Dr. J. W. Kelley, 607 Ferguson Bldg., Los Angeles; McGill University, 1908; Endorsed by Drs. R. B. Sweet and R. Watson Graham.

Dr. Louis Josephs, 1414 S. Hope St.; University of Southern California, 1916; Endorsed by Drs. Rea Smith and W. W. Richardson.

Dr. J. Walter Reeves, 1109 Marsh-Strong Bldg.; College of Physicians and Surgeons of University of Southern California, 1913; Endorsed by Drs. Wm. R. Molony and Chas. C. Browning.

Dr. Muriel Dranga Cass, 1642 Reid St.; University of Pittsburgh, 1910; Endorsed by Drs. Harry M. Brandel and Donald J. Frick.

Dr. Sandford Whiting, 1102 Citizens National Bank Bldg.; Pulte Medical College, Cincinnati, Ohio, 1892; Endorsed by Drs. George L. Cole and Walter Lindley.

Dr. W. J. McKenna, 506 Exchange Bldg.; University Iowa Medical College, 1910; Endorsed by Drs. H. G. McNeil and Leo A. Schroeder.

Dr. J. B. Luckie, 209 Dodsworth Bldg., Pasadena, Cal.; Coll. University of Colorado, 1913; Endorsed by J. H. Breyer and Henry B. Stehman. Dr. S. M. Alter, 418 Investment Bldg., Los Angeles, Cal.; Coll. Harvard Medical School, 1912; Endorsed by Howard W. Seager and Geo. H. Kress.

Dr. Wm. Harwell Hodson, 719 Baker-Detweiler Bldg., Los Angeles, Cal.; Coll. Bellevue Hospital Medical, 1882; Endorsed by W. B. Kern and J. R. Stafford.

Dr. Constantine R. Kalionzes, 801 Black Building, Los Angeles, Cal.; Coll. National University, 1900; Endorsed by John A. Colliver and Dr. D. Z. Schwartz, 901 Black Building.

Dr. C. E. Early, 232 Consolidated Realty Co., Los Angeles, Cal.; Indiana University, 1911; Endorsed by Dr. Melvin Ellis, and Dr. J. Rollen French.

John M. Callaghan was one of the men to go with the first 5% contingent from Los Angeles to Camp Lewis, American Lake, Washington. In a letter published in the Los Angeles Times he says—

"Our arms are a little sore yet from the inoculation. I think that the most painful part of the operation was the unfeeling manner in which the doctors did their work. They had efficiency down to a point which would even make the Kaiser smile with satisfaction. One doctor grabbed one arm and the second doctor the other. They both attacked us at once, and seem to take a fiendish delight in the look of surprise, pain and indignation with which we greeted their sudden onslaught. It may surprise you to know that nine fellows from our company fainted after the ordeal. This was no reflection on their qualities as soldiers. I think their heads grew dizzy trying to watch both doctors at the same time."

While there may be some exaggeration in this statement, yet at the same time there is a lesson to be learned from it. Physicians that are in the Army or out of it should not forget to place themselves in the other fellow's position.

### BOOK REVIEWS

EGIONAL SURGERY—BINNIE. A Treatise on Regional Surgery by Various Authors. Edited by John Fairbairn Binnie, A.M., C.M., F.A.C.S., Kansas City. Volume I. With 351 illustrations. P. Blakiston's Son & Co., 1012 Walnut Street, Philadelphia. Price \$7.00 net. REGIONAL

This treatise will long be known as a classic. The binding, paper, type and illustrations are attractive. The latter were chosen for illustrative rather than decorative purposes. The various writers were encouraged to present their opinions rather than what they thought other people would think that they ought to think. There is an occasional overlapping of subjects and some divergence of opinion expressed by the contributors, which may be regarded as an advantage rather than otherwise.

The treatise is being issued in three This volume includes the Head, Bronchial system, Thorax and the Breast. Volume II will be devoted to the Abdomen, the Genito-urinary system and the Spine. Volume III will cover the upper and lower extremities and a section on the Thoracic Walls, Lungs and Plurae. The best praise may be expressed in the hope that the succeeding volumes may be as good as Volume I.

THE CONVERSION OF HAMILTON WHEELER. A Novelette of Religion and Love introducing studies in religious psychology and pathology. By Prescott Locke. The Pandect Publishing Co., Bloomington, Ill., 1917.

This volume comes to us with a circular urging that it be not passively ignored. It is one of the rottenest pieces of pseudoliterature we have been called on to review. In the garb of a "novelette" surcharged with droll conversations, an attack is made upon evangelistic propaganda and religious revivals, that might be decidedly dangerous if it were more readable, logical and coherent. Aside from the neat

cloth binding and embossing, the volume is thoroughly unattractive. The paper is poor. The style is prosaic. The theme is unfortunate or worse. It is supposed to be "a contribution to the Mental Hygiene movement, on the religious aspects of the etiology of psychopathology." Mental surely cannot flourish on such unscientific contributions.

THE PRACTICAL MEDICINE SERIES.

HE PRACTICAL MEDICINE SERIES. Comprising ten volumes on the year's progress in medicine and surgery, under the general editorial charge of Charles L. Mix, A.M., M.D., Professor of Physical Diagnosis in the Northwestern University Medical School. Volume IV, GYNECOLOGY. Edited by Emilius C. Dudley, A.M., M.D., Professor of Gynecology, Northwestern University Medical School; Gynecologist to St. Luke's and Wesley Hospitals, Chicago; and Sydney S. Schchet, M.D., Instructor in Gynecology, Northwestern University Medical School; Adjunct Gynecologist, Wesley Hospital, Chicago. Volume V, PEDIATRICS. Edited by Isaac A. Abt, M.D., Professor of Pediatrics, Northwestern University Medical School, Attending Physician Michael Reese Hospital, with the collaboration

trics, Northwestern University Medical School, Attending Physician Michael Reese Hospital, with the collaboration of A. Levinson, M.D., Associate Pediatrician, Michael Reese Hospital.
ORTHOPEDIC SURGERY. Edited by John Ridlen, A.M., M.D., Professor of Orthopedic Surgery, Northwestern University Medical School, with the collaboration of Charles A. Parker, M.D. Series 1917. Chicago: The Year Book Publishers, 608 South Dearborn Street.
The price of the series of ten volumes is \$10.00. These separate volumes sell for \$1.35.

for \$1.35.

The literature shows a marked falling off this year in the number and importance of articles from European nations now at war, and a gratifying increase in important American contributions. Among subjects which have received special attention may be mentioned organotherapy, in which there is recorded much activity and little close, careful experience. The reader is referred to the forthcoming transactions of last annual meeting of the American Gynecological Society for up-to-date pronouncements on this subject. causes and disorders of menstruation and the menopause have given rise to

numerous papers, most of which are characterized by varying degrees of superficiality. Displacements, especially retroversions, not to mention those which are harmless, continue to be the stormcenter of surgical attacks upon the female pelvis. What may be perhaps rather facetiously termed gynecologic engineering is reaching its zenith at the hand of the general surgeon. It is said that the new operations in this restricted field have now reached the appalling number of eighty-one. employment of germicidal agents in the treatment of infections of the female genitalia is more and more recognized as ineffective unless carried to a degree of such destruction of tissues as would render their use prohibitive. Fortunately, increasing reliance is now placed on the germicidal power of the tissues themselves, that is, on the natural resistance of the patient to invasions of bacteria. The curette, with its morbidity, apt to mention its mortality, hitherto considered by many to be a relatively harmless instrument, is now to a great extent being relegated to the limbo of the lancet and the emetic. Disinfection of the uterine cavity no longer appears to fulfill the extravagant claims for that procedure of the enthusiasts of the last decade. Radiotherapy of carcinoma seems to be gaining ground rapidly as a valuable agent, not only for its palliative results, but even what seems in many cases like miraculous cures. Even inoperable cases of carcinoma apparently have disappeared in some cases as a result of radiotherapy.

Leighton F. Appleman, M.D., Instructor in Therapeutics, Jefferson Medical College, Philadelphia; Ophthalmologist to the Frederick Douglass Memorial Hospital and to the Burd School; Instructor in Ophthalmology, Philadelphia Polyclinic Hospital and College for Graduates in Medicine.

uates in Medicine.
Volume III, September, 1917. Diseases of the Thorax and its viscera, including the heart, lungs and blood vessels. Dermatology and Syphilis. Obstetrics. Diseases of the Nervous System. Lea & Febiger, Philadelphia and New York. Published quarterly. Subscription price \$6.00 per annum.

The third year of the world's war has contributed its heavy share to the accumulating material for pathological and clinical study. It has happily not engendered any new type of epidemic camp disease, or recorded any aggravated recrudescence of those of the past. This is largely due to the progressive experience and organization of the medical service, and to the lessons it has learned from two previous winters of trench warfare.

The Roentgen rays for diagnosis have led to great pathological advances in pulmonary tuberculosis. Usually the X-rays reveal more tuberculosis than any physical examination, just as a postmortem generally does. The roentgenologist has a great advantage over the pathologist, in contemplating not a dead but the living pathology; and also over the physician, in being able to observe and compare all the successive stages. It has been shown that almost every case of pulmonary tuberculosis with tubercle bacilli in the sputum can diagnosed independently by the roentgenologist; and in many cases in which the sputum does not contain tubercle bacilli and the Roentgen diagnosis is positive, the subsequent history corroborates the Roentgen diagnosis. As it so frequently reveals new or unexpected conditions, no case should be considered as having been thoroughly and completely examined until a Roentgen examination has been made.

No progressive physician can afford to be without Progressive Medicine.

PROGRESSIVE MEDICINE. A quarterly digest of advances, discoveries and improvements in the medical and surgical sciences. Edited by Hobart Amory Hare, M.D., Professor of Therapeutics, Materia Medica and Diagnossis in the Jefferson Medical College, Philadelphia; Physician to the Jefferson Medical College Hospital; One time Clinical Professor of Diseases of Children in the University of Pennsylvania; Member of the Association of American physicians, etc. Assisted by

### **MISCELLANEOUS**

#### GOITRE.

An Analysis of 125 Cases with a Note on the Treatment.

By Leigh F. Watson, M.D., Chicago.
Abstract:

The author reviews the records of 125 goitre patients considering the cause, age at onset, and effect of previous operations in certain cases. He illustrates by tables the degree of enlargement, and reports the results following quinin and urea injection.

In 43 per cent no exciting cause could be elicited; in the remaining 57 per cent the onset could be ascribed to a definite exciting cause. Of the 125 cases, 15 per cent was caused by worry; parturition was responsible for 11 per cent, and in 9 per cent the condition was due to puberty. Twenty per cent gave a family history of goitre and 11 per cent of nervousness; 19 per cent had had tonsilitis. Forty-five per cent of the exopthalmic patients first noted the goitre eight years before examination at the average age of 34 years, and the symptoms developed at the age of 40. Fifty per cent gave a history of acute onset, two years before coming under observation at the average age of 29 years. Sixty per cent of the nonexopthalmic patients observed that they developed more marked symptoms of intoxication as the goitre became more chronic.

Before coming under treatment, five exopthalmic patients had had ligation of the superior thyroid arteries with temporary relief; four had had partial thyroidectomies without permanent benefit; three had had pelvic operations without lessening the hyperthyroidism; the condition of one was aggravated by a panhysterectomy; and one had had a tonsillectomy six months before without influencing the severity of the exopthalmic symptoms. Enlargement

usually begins in the right lobe, sometimes in the isthmus and least frequently in the left lobe. In 95 per cent of the exopthalmic patients of this group both lobes and isthmus were involved before the goitre became exopthalmic. A majority of the patients noticed increasing symptoms of intoxication as the goitre became more chronic, gradually involving both lobes and isthmus. Eighteen per cent of the mildly toxic patients became exopthalmic after an average period of five years. This study indicates that both nontoxic and toxic goitre occur later in life in nongoitrous localities than in sections where the disease is more prevalent.

The following tables show the results after quinin and urea injections:

Effect of the Injection on Symptoms—Not

Relieved. Improved. Imp.
Exopthalmic ....85 (aver. 4 mos.) 15 (Nonexopthalmic 84 (aver. 2 mos.) 10 (Effect of the Injections on Goitre—

Cured. Reduced. Red. Exopthalmic ....80 (aver. 5 mos.) 15 Nonexopthalmic 75 (aver. 4 mos.) 12 13

Two patients suffering with severe toxic goitre with exopthalmos of several years' duration, received slight benefit; later a lobectomy was done without additional relief. Four exopthalmic patients were pregnant two to four months. Relief from hyperthyroidism followed the injection and they went to term without recurrence and had normal deliveries. The number of patients cured is highest in the group of those who came for treatment early in the disease; the benefit received by those who came later was in proportion to the degree of damage done the circulatory and nervous sys-A goitre that has once disappeared has never recurred. A majority of the patients in this group have been under observation for two to four

## Stanolind

# Trade Mark Reg. U. S. Pat Off. Liquid Paraffin (Medium Heavy)

Tasteless - Odorless - Colorless

## In Treating Hemorrhoids

STANOLIND Liquid Paraffln, used regularly, very generally relieves hemorrhoids and fissure, even when of some years' standing.

Since these morbid conditions are usually the result of constipation and are aggravated by straining, Stanolind Liquid Paraffin aids by rendering the intestinal contents less achesive, by alwaying irritation and thus by permitting the diseased tissues to become healed.

Where a contraindication for operative treatment exists, the use of Stanolind Liquid Paraffin in these conditions will frequently give relief from distressing symptoms and may even permit the patts-tib be restored to a condition where operative procedure may be pastroned.

The special advantage of Stanoind siquid Parofin lies in the fact that its beneficial effects are not dirinished by continual use, as is the case with almost any other laxative.

Stanolind Liquid Paraffin acts by lubrication and by adding bulk to the indigestible intestinal residue.

A trial quantity with informative booklet will be sent on request.

#### Standard Oil Company

(Indiana)

72 West Adams Street,

Chicago, U.S.A.





years. The quinin and urea injection has limitations the same as any other treatment for goitre, and can be employed only in selected cases. The treatment of the exopthalmic type in young adults is very difficult, and should be attempted only under the most favorable circumstances. If the best results are to be secured, hyperthyroidal patients must have at least a year of mental and physical rest after treatment.—The New York Medical Journal, Sept. 22, 1917, Vol. CVI, pp. 549 and 450.

The quinin and urea injection treatment for hyperthyroidism was first mentioned in the J. A. M. A., Jan. 10, 1914, and a number of cases reported in the same Journal. Sept. 25, 1915. Dr. Watson arranged an exhibit on this subject, which coeived an award, in the Scientific Section, at the A. M. A. meeting in Detroit, in 1916 (J. A. M. A., June 24, 1916, pp. 2087).

#### OCCUPATION OF DECEDENTS.

More accurate and definite statements of the occupations of decedents should be written upon death certificates. Until this is done mortality statistics by occupations will continue to be unsatisfactory.

The Bureau of the Census is planning for the near future a monograph on tuberculosis. How much more valuable this monograph will be if it is possible to show accurately the occupations of decedents.

As a physician you appreciate the importance of such statistics. As a physician you are by education better qualified than the ordinary informant to understand a proper statement of occupation.

Will you not, therefore, take pains to see that the occupation items upon each one of your death certificates are properly supplied?



# X-Ray Laboratory

Special attention paid to

Radiography of the Chest and Gastro-Intestinal Tract

X-RAY DEPARTMENT of the CALIFORNIA HOSPITAL





ol. XXXII.

LOS ANGELES, NOVEMER, 1917

No. 11

DR. GEO. E. MALSBARY.

Associate Editors,

Or. Walter Lindley, Dr. W. W. Watkins, Dr. Ross Moore, Dr. George L. Cole,
Dr. Cecil E. Reynolds, Dr. William A. Edwards, Dr. Andrew W. Morton,
Dr. H. D'Arcy Power, Dr. B. J. O'Neill, Dr. C. G. Stivers, Dr.

Boardman Reed, Dr. W. H. Dudley, Dr. J. M. Mathews.

#### TESTING THE AVIATION CANDIDATE.

Y C. G. STIVERS, M.D., OTOLOGIST, AVIATION EXAMINING UNIT, LOS ANGELES, CAL.

Applicants for the Aviation section f the Signal Corps, men who wish be Airplane pilots, or fighters oust stand a very strict examination. hey must pass the tests submitted each drafted man for the Army and addition be examined to find out they have the requisite eyesight 20-20 without glasses), color sense, tereoscopic vision, hearing (40-41), asal breathing and dynamic and static enses. The Eustachian canals must be atulous, the nasal septum straight and he turbinates free from hypertrophies nd, most important to the Aviator, the quilibrium sense must be in a healthy unctioning condition.\*

As Major I. H. Jones says "In Aviation we have a practical example of the importance of the ear in maintaining equilibrium." In Aviation equibrium is maintained by three senses, the balance sense of the internal ear, ight and a group of general impressions which for convenience is called the muscle sense. It is not necessary

Memorandum No. 11, issued by the Chief Surgeon, Aviation Section, Signal Corps. for an individual to have sight and perfect internal ears in order to have good equilibrium; if the internal ears are impaired, the individual can maintain excellent equilibrium by means of sight and the muscle sense; if his sight is impaired, the ear sense and the muscle sense enable him to maintain his balance.

Sindarly, an individual, through various toxagenias such as mumps, syphilis and the infectious fevers, may have ac impairment and even a complete destruction of his ear balance serse and yet not be conscious of this defect in any way, simply because his sight and makele sense make it possible for him to maintain his equilibrium. All this, however, takes for granted that the individual is on "terra firma." When the human being becomes a bird, as it were, he suddenly finds himself in a new environment.

Without a functioning vestibule, to govern the balance sense, it is impossible to become a (safe) bird-man. The Aviator is often flying in the dark, as when enveloped in fog or in a cloud or at night so that he cannot see. He

has no firm earth to press his feet against so that he lacks the aid of the sense of gravity.

It is probable that Aviators have fallen to their death because, unknown to them they did not have a functioning vestibular apparatus; in the event of an accident happening, or a combination of difficulties in which all normal faculties would be requisite, because of an imperfect ear-mechanism they were unable to maintain their balance.

A normal vestibule being of such prime importance, in fact, absolutely necessary for an Aviator, common prudence suggests the most careful examination of the degree of function of each candidate's internal ears, before taking up Aviation.

It is wiser and better to find out if one lacks the balancing sense before risking his own life and the life possibly of an observer, besides the lives of many fighting men whose movements are depending on the information to be derived from the flyer. Just today in the examination of a candidate, a personal friend, we found him absolutely wrong in his responses to the vesstibular tests, both after turning and after douching. He fell to the left when he should have fallen to the right and was wrong in his past-pointing. We feel that probably we have saved this young man from falling to his death in an airplane.

The ear tests are exact and furnish sufficient data to test out the functions of the internal cars, the vestibular apparatus, the 8th nerve, the brain stem, cerebellum and the entire balance mechanism.

When our Government's Medical Chiefs realized that a state of war existed between United States and Germany, they decided that an enormous number of Aviators must be secured in the shortest possible time. They adopted after thorough trial, the tests for equilibrium worked out at the

University of Pennsylvania by Major Isaac H. Jones in collaboration with Dr. Alexander Randall.

Barany's Chair, modified by Major Jones, was selected and all of the thirty or more Aviation examination centers in the larger cities of the country are equipped with it. This is standard. The work of the examiners was standardized by having a medical officer visit each group, and instruct the individual members in the exact technique of the tests. In a few months the Vestibular tests have been placed on an absolutely uniform basis, so that no candidate would be able to say "I wish I had been examined where the tests are easy," for the tests are the same in all the examining centers. The official instructions for determining equilibrium by the vestibular tests are as follows:

The Nystagmus, Past-pointing and Falling after turning, are tested. The turning-chair must have a head-rest which will hold the head 30 degrees forward, a foot-rest and a stop-pedal. Jones' modification of Barany's chair is officially required; this made possible the establishment of an absolute standard. While the tests could be made by using other types of turning-chairs, an exact quantitative estimation of the responses can be definitely established only by the use of a standardized chair.

(a) Nystagmus. First of all a spontaneous Nystagmus must be looked for. It is noted whether there is any twitching of the eyes when gazing straight ahead, or looking either to the extreme right, the extreme left, up or down. Head forward 30 degrees; turn candidate to the right, eyes closed, 10 turns in 20 seconds. The instant the chair is stopped, click the stop-watch; candidate opens his eyes and looks straight ahead at some distant point. There should occur a horizontal nystagmus to the left of 26 seconds' duration. A

variation of 10 seconds is allowable (either as low as 16 seconds or as high as 36 seconds).

#### (b) Pointing.

- 1. Candidate closes eyes, sitting in chair facing examiner, touches examiner's finger held in front of him, raises his arm to the perpendicular position, lowers the arm and attempts to find the examiner's finger. First the right arm, then the left arm. The normal is always able to find the finger.
- 2. The pointing test is repeated after turning to the right, 10 turns in 10 seconds. During the last turn, the stop-pedal is released and as the chair comes into position, it becomes locked. The right arm is tested, then the left, then the right, then the left, until candidate ceases to past-point. The absolute normal will past-point to the right 3 times with each arm. (However, one past-pointing to the right of each arm qualifies, if the nystagmus and falling are normal.)
- 3. Repeat pointing test after turning to the left. (Similarly, one past-pointing of each arm to the left qualifies, if the nystagmus and falling are normal.)
- (c) Falling. Candidate's head is inclined 90 degrees forward. Turn to the right, 5 turns in 10 seconds. On stopping, candidate quietly sits up and should fall to right. This tests the vertical semicircular canals. Turn to the left, head forward 90 degrees, on stopping, the candidate again sits up and should fall to the left.

Obviously these tests as presented in this blank are not intended to make a diagnosis of a pathologic lesion. The object is merely to determine whether or not the ear-mechanism is normal. If, after the tests, the candidate shows normal responses in nystagmus, pastpointing and falling, he is fit for the Aviation service; if he does not, he is unfit for that service. These simple turning tests eliminate all unnecessary time-consuming diagnostic procedures.

The entire series of tests as outlined in the blank requires only 3¾ minutes and yet in this short time we are able to determine the integrity of the internal ears, the VIII nerves, and the pathways through the medulla oblongata, the pons, the six cerebellar peduncles, the cerebellum itself and the cerebral crura to the cerebral certex.

Incidentally, these tests are in no sense severe and could in fact hardly be regarded as unpleasant. Occasionally nausea occurs after a few turnings; it is then merely necessary to stop the examination for the time being and to complete the remainder of the tests after an interval of a half-hour. There is no need whatever to make these tests in any way distressing to the candidate.

These turning tests quickly separate the obviously fit from the unfit. The majority of the candidates show normal responses; no further testing is required and they therefore are qualified and accepted. Some candidates show such marked subnormal responses that they are immediately disqualified and rejected. A certain limited number give what might be termed "borderline'' responses; the question then arises, has this particular applicant sufficient balance-sense to become an Aviator? It is here that the Caloric test is useful. The turning has tested both the right and left ears simultaneously. The Caloric method enables us to test each one separately. Water at 68 degrees is allowed to run into the external auditory canal from a height of about 3 feet through a stop nozzle, with the head tilted 30 degrees forward until the eyes are seen to jerk or the individual becomes dizzy. The length of time from the beginning of the douching until the jerking of the eyes becomes apparent, or until the applicant says he is dizzy, is accurately measured by a stop-watch. The type of nystagmus is then noted. It should

be rotary and the direction of the jerk should be to the side opposite the ear douched. The length of time shown by the stop-watch in the normal is 40 seconds. The eyes are then closed and the past-pointing is taken. The head is then immediately inclined backward 60 degrees from the perpendicular (or 90 degrees from the original position). There should then appear a horizontal nystagmus to the side opposite to the ear douched. The eyes are then closed and the past-pointing is then taken with the head in this position. left ear is then douched and the same procedure carried out. If the Caloric test applied to one of these "borderline" cases show only a slight impairment of the responses from each ear, the candidate is qualified. A slight impairment would be indicated if instead of the normal 40 seconds of douching there was required not more than 90 seconds of douching. If, on the other hand, one ear shows normal responses, whereas the other ear shows responses only after more than 90 seconds of douching, the candidate is disqualified. Care should be taken to be certain that the cold water is reaching the drumhead during this Caloric test, as wax or other obstruction in the external canal would interfere with the responses in a perfectly normal individual.

In the Los Angeles Unit, the leading Oto-Laryngo-Rhinologists, Internists, and Ophthalmologists are coöperating "doing their bit" for the service of the Country. From 5 to 20 candidates are being examined daily, the staff devoting an entire morning to their examination. We learn new things all the time. For instance in the past-pointing a candidate was asked the other day why he past-pointed a certain distance, then quickly corrected the deviation and moved his arm nearer toward the examiner's body. He replied that he "followed the voice,"

and pointed toward that, also that he could feel when his arm was pressed close up against his body, he was apt to come closer to the examiner. We limit our remarks therefore to instructions before the turning, and stand away from a point directly in front of the candidate so that his arm will not be guided by touching his body.

A few candidates have been found with deviations of the nasal septum, to an extent interfering with nasal Some have had respiration. tonsil hypertrophy and diseased tonsils. These surgical conditions do not disqualify, but necessitate careful operation, thorough resection with complete restoration of nasal function, and in the case of the tonsils, complete enucleation, by specialists. The after results must be satisfactory. The candidates are not put to any expense for this surgical work all surgeons donating their services gladly to the service of the Country in its time of trial.

#### \*References:

- Memorandum No. 11, issued by the Chief Surgeon, Aviation Section, Signal Corps.
- 2. Isaac H. Jones, M.D., Journal A.M.A., Nov. 10, 1917. "The Ear and Aviation."

The first meeting after the summer of the San Bernardino County Medical Society was held at the Chocolate Palace, at San Bernardino, October 2nd. After the banquet, the annual election of officers took place which resulted in the following being chosen for the coming year: President, Dr. G. G. Moseley, Redlands; First Vice-President, Dr. W. H. Stiles, San Bernardino; Second Vice-President, Dr. J. A. Champion, Colton; Secretary and Treasurer, Dr. C. L. Curtiss, Redlands. Delegates to the meeting of the state society, Dr. D. C. Strong, San Bernardino; G. G. Moseley, Redlands. Alternates, Drs. W. W. Savage and C. L. Curtiss.

# WHAT THE AMERICAN SOLDIER NOW FIGHTING IN FRANCE SHOULD KNOW ABOUT TUBERCULOSIS.\* WITH AN INTRODUCTION.

By S. ADOLPHUS KNOPF, M. D., (NEW YORK & PARIS)

Captain, M. R. C., U. S. Army; Professor of Medicine, Department of Phthisiotherapy, at the Post-Graduate Medical School and Hospital; Senior Visiting Physician to the Health Department's Riverside Hospital-Sanatorium for the Consumptive Poor of the City of New York.

WITH AN INTRODUCTION

By WILLIAM H. WELCH, M.D., LL. D.

Dean and Professor of Pathology at Johns Hopkins Medical School, Baltimore; Chairman of the Advisory Committee on Public Health to the United States Government. President of Board of Directors of the Rockefeller Institute for Medical Research. \*Published by authority of the Surgeon General of the U. S. Army in the Southern California Practitioner, the Medical Record, and a number of other American, Canadian and French medical periodicals.

Baltimore, Oct. 10, 1917.

S. Adolphus Knopf, M. D.,

New York City.

My Dear Dr. Knopf:—You have added to your many services in the anti-tuberculosis cause by the preparation of your timely brochure "What the American Soldier Now Fighting in France Should Know About Tuberculosis."

I find this article characterized by the same skill, simplicity and lucidity in presentation and by the same ability in the selection of essential points which have marked your previous publications in this field.

Particularly interesting is your suggestion that our soldiers possessed of such knowledge as you impart and trained in habits of cleanly, healthy living may be missionaries of health as well as comrades in arms to their French colleagues.

Everything possible must be done to protect our soldiers from the risks of tuberculosis, and I believe that the public may be assured that this will be done. Undoubtedly the education of the individual soldier is an important part of these efforts and your pamphlet is an important contribution to this end. There is every reason to anticipate that our army will be spared the pitiful experience of the French in this matter of tuberculosis.

Very sincerely yours, WILLIAM H. WELCH.

#### FOREWORD

Ever since the publication of Professor Hermann M. Biggs' remarkable article "Tuberculosis in France" in The Survey of May 5th, 1917, I have been the recipient of many letters and personal visits from parents and friends of our boys who have gone to France to fight for the liberty and democracy of the world. I have been asked again and again what can be done for our boys so that they may not contract tuberculosis while fighting in France. In the number of The Survey just mentioned, Dr. Biggs made the following authoritative statement: "In the beginning of this year it was estimated that about 150,000 French soldiers had been returned to their homes with active tuberculous disease and that more are constantly being discharged for this cause." Besides these 150,000 Dr. Biggs conservatively estimated that there would be altogether, including the civilian population, not far from 500,-000 cases of tuberculosis in France to be dealt with if the war were to terminate at once. This was in January, 1917.

That such statements as these should cause serious anxiety to parents whose sons are now in France or are about to leave for that country, is easily understood. Yet these parents as well as their brave boys, should know that the danger of the latter becoming tuber-

culous is not nearly as great as one might think from the figures quoted.

There was a time in our own country when the frequency of tuberculosis and the death rate therefrom was as high as it is now said to be in France. It was knowledge of the origin of the disease on the one hand and the methods of cure of the disease on the other. which have resulted in a remarkable decrease of tuberculosis throughout the United States. Popular anti-tuberculosis education under the leadership of Dr. Biggs, and the sanatorium movement under the guidance and inspiration of the late Dr. Trudeau, have made the United States rank next to England, the country which has the lowest tuberculosis morbidity and mortality of any of the great countries of the world.

To summarize in as concise and practical a way as possible the ordinary precautions and the measures which have helped in the fight against tuberculosis in the United States, as they may be applicable to the lives of our boys in the fields and trenches in France, is the object of this little essay. It is the author's hope that thereby not only may the anxiety of American fathers, mothers, and wives be allayed but that by the example given to their brave French comrades in the methods of living even in trenches, dug-outs, tents or barracks, or when billeted in the homes of French civilians, our own soldiers may be effective not only in fighting for liberty and democracy, but also in fighting that other great enemy of mankind, known as consumption. Let our American soldiers in the field and also our French brethren in arms know as much as possible about tuberculosis, its causes and prevention, and they will be able to fight this insidious and invisible enemy as victoriously as they are fighting the visible powers which have plunged the world into this indescribable catastrophe.

To make this little essay as practical

as possible, I will arrange the subject matter in the form of questions and answers.

What is tuberculosis, particularly the most common type known as pulmonary tuberculosis, or consumption?

It is the most prevalent of all diseases and is chronic, infectious, communicable, preventable and curable. All these terms are self-explanatory, except perhaps the word communicable, which the author prefers to the word "contagious." To illustrate the difference between the words "communicable" and "contagious," let us take the two diseases smallpox and consumption for examples. Smallpox is a highly contagious disease, the word contagious coming from the Latin contingere, to touch. No matter how clean or conscientious the smallpox patient may be, no matter how well conducted the smallpox hospital may be, it is most dangerous to touch the smallpox patient and it is most unsafe to visit a smallpox hospital unless you have been vaccinated recently or revaccinated. On the other hand, the honest and conscientious tuberculous patient, who takes care of his expectoration in the manner which will be described later on, can be associated with and touched without any danger of contracting the disease. The sanatorium or tuberculosis hospital, where all precautions concerning the proper disposal of infectious spittle or expectoration are religiously observed and the patients taught to be conscientious, is the safest place not to contract consumption.

What is the direct cause of tuberculosis?

The direct cause of tuberculosis, or consumption, is always the bacillus of tuberculosis, which is a microscopic organism found in the affected parts of the body. Pulmonary tuberculosis, or tuberculosis of the lung, is the type of tuberculosis most frequently found and the type with which those brave French

soldiers are now so frequently afflicted; but all other organs of the body (bones, intestines, etc.) can become affected by tuberculosis.

Tuberculous disease is locally characterized by countless tubercules, that is to say, small rounded bodies, visible to the naked eye. The bacilli, lodged in these tubercles of which they cause the formation, are parasites, belonging to the lowest scale of vegetable life and must be considered as the specific cause of all tuberculous diseases. This parasite, so small that it can only be seen with the aid of a powerful microscope, not only gradually destroys the lung substance through ulcerative processes, but at the same time gives off certain poisonous substances called toxins which cause various, and often serious, symptoms. In the secretions or expectorations coming from an affected lung, millions of bacilli can often be found.

## What are the early symptoms of Pulmonary Tuberculosis which can be recognized by the layman?

The important earlier symptoms of pulmonary tuberculosis are long-continued cough with or without expectoration, or hoarseness, loss of flesh, flushes or pallor in the face, feverish sensation in the afternoon, occasional night-sweats, chilly sensation in the morning, loss of appetite, sometimes a little streak of blood in the expectoration, loss of strength manifesting itself in easy tiring, frequent colds, a perceptible quickening of the heartbeats after slight exertion, a little change in disposition, such as an increased irritability or a feeling of depression.

#### What are the methods whereby tuberculosis is communicated from one human being to another, or from animal to man?

The three methods by which the germ may enter the human system are by inhalation, ingestion, or inoculation. The tuberculous sputum, when dried and pulverized and mingled with the dust of the air, may be inhaled. Tuberculous meat or milk taken as food is prone to produce tuberculosis, particularly in children. Inoculation may take place when an open wound or abrasion of the skin comes in contact with tuberculous substance.

## How can these methods be prevented or the germs destroyed?

The main method of contracting tuberculosis is by inhalation. Whoever coughs and expectorates, whether it be in the trenches, dug-outs, barracks, armories, or other confined places, should endeavor not to deposit the sputum where it has a chance to dry up, unless it can be where exposure to direct sunlight will render it harmless. When one coughs let him always hold his hand before his mouth. He will thereby avoid inhalation-infection and also spray- or droplet-infection if he should happen to be afflicted with tuberculosis, influenza, or even an ordinary cold. By droplet infection is understood that manner of conveying the disease by the spray of small particles (droplets) of infectious saliva during the so-called dry cough or even sneezing, and in some individuals during excited speaking.

Of course, it is out of the question to speak of the use of spittoons placed on the floor, (figs. 1 and 2), pocket spittoons (figs. 3, 4 and 5), or even pieces of cloth to be used for expectoration in the trenches, dug-outs, or similar places; but when in ordinary places of human habitation, barracks, tents, armories, or houses of civilians, no matter whether one expectorates because of a simple cold or influenza, he should never do so on the floor or anywhere but in some kind of receptacle where he is sure that the contents cannot dry and become pulverized. Whenever a receptacle is used it should be covered so that flies cannot have access to it and thus carry the germs of the disease onto food or whatever they may alight on.

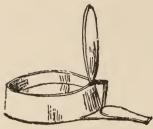


Fig. 1.—Metal Floor Cuspidor with large opening. Should be partly filled with wet sawdust. Cover worked by the foot.



Fig. 2.—The same when closed.



Fig. 3.—Nickel-plated oval-shaped pocket flask, manageable with one hand. Funnel removable.



Fig. 4.—Pasteboard Sputum Purse.



Fig. 5.—Pasteboard Sputum Purse. Small size.

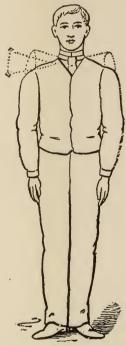


Fig. 6.—Breathing Exercise with rolling of shoulders.

Spittle should be either poured into the water closet or rendered harmless by some antiseptic fluid (5% carbolic acid solution), pieces of cloth used to receive sputum should be burned and paper spitcups with their contents should be disposed of in the same way, for it must be remembered that even the germs of ordinary colds may prove quite serious, particularly when inhaled by one whose general health has been undermined by fatigue, privation of sleep, want of food, etc. These precautions

with the expectoration should be especially adhered to when the soldiers, after leaving the trenches temporarily or permanently, are billeted in peasants' houses in villages, or citizens' homes in towns or cities.

Against the danger of tuberculous food in the form of infected milk or meat, sterilizing or boiling the milk and thoroughly cooking or broiling the meat. Suffice for all practical purposes. To protect oneself against getting tuberculous inoculation from any skin wound or scratch, it is best to let the wound pleed freely so as to wash away any infectious substances and then use a clean piece of cheesecloth or muslin, steeped in hot water or alcohol, and tie up the wound until surgical aid can be obtained.

## What protects the healthy individual against contracting tuberculosis?

It should be known to all those who fear to contract tuberculosis because they have been in contact with a tuberculous patient and believe to have inhaled some bacilli, that a healthy individual need not fear to become tuberculous unless he is constantly exposed to the inhalation of the germs. nealth, when the human system is in good condition, it is provided with nany means of defense against the aceidental inhalation of bacilli. First of all, there is the mucous membrane of the nose of which the secretions have what is known as bactericidal, that is to say, germ-killing properties. upper air passages are lined with very fine hair-like bodies, known as cilia, which, with an upward waving motion, prevent foreign bodies such as dust particles and germs from entering the deeper respiratory tract. Lastly, in the blood itself, the white blood corpuscles are active in destroying the bacteria. Similar powers are also ascribed to the secretions of the stomach. Besides these four sources of defense, there exist probably in most of us in our circulatory system what is known as antibodies, which likewise counteract the invasion of tuberculosis germs. Thus, any one possessing average good health need not be afraid of becoming tuberculous even though he may from time to time come in contact with a patient who is not over careful.

In order to contract tuberculosis from the occasional inhalation of tuberculosis germs or even the ingestion of tuberculous food, there must be the conditions in which the tuberculosis germs can grow, or in other words, one must be predisposed either by heredity or acquisition. This predisposition may be accounted for by the person never having possessed or having lost the natural resistance to the germs. When an individual has never been robust and has never possessed the natural resistance to tuberculosis, he has probably inherited this predisposition.

#### What constitutes a hereditary predisposition to tuberculosis?

A tuberculous parent, particularly a tuberculous mother, when she has been actively ill with the disease during the time of pregnancy, may transmit to the child such a weakened system that it becomes a ready prey to tuberculosis. If the mother is careless she is sure to infect the child after birth, and because of this early after-birth or postnatal infection, tuberculosis is often considered hereditary.

However, for the comfort of those who may have a tuberculous parent let me say here that because of the good care bestowed upon him, many such a child has grown up strong and well, and if he has not had tuberculosis by the time he has reached military age, and the disease has not been discovered by the recruiting surgeon, he may safely consider himself free from danger of developing tuberculosis if he leads what might be simply called a normal Godfearing life.

Aside of this hereditary condition, there are of course, many ways in which a predisposition or loss of natural resistance, producing the ready soil for the growth of the tubercle bacillus, may be acquired.

## How is the predisposition to tuberculosis acquired?

First of all, there are certain diseases which often leave the system in a weakened condition; among them are measles, whooping cough, typhus and typhoid fever, grippe, chronic bronchitis, pleurisy, pneumonia, also all venereal diseases. Privation, want of food, lack of air and sunlight, insufficient clothing, and the prolonged inhalation of irritating substances, as well as over-fatigue and lack of sleep, may also render the system susceptible to tuberculosis. Excessive smoking, especially of cigarettes when the smoke is inhaled, is apt to injure the respiratory system and make it more susceptible to disease, to weaken the action of the heart, impair the function of the nervous system, and lessen the general efficiency. One who has never smoked would better not acquire the habit one of the greatest predisposing causes of tuberculosis is the excessive use and abuse of alcoholic drink. When the alcoholic contracts tuberculosis, the outlook for a cure is most unfavorable. Patients recovering from the just mentioned diseases should be particularly careful to avoid prolonged contact with tuberculous individuals.

## What can the soldier in the field do to prevent becoming predisposed to tuber-culosis?

Since one of the greatest predisposing causes to tuberculosis is alcohol, it is of course, best for the soldier to abstain from the use of liquor and strong alcoholic drinks entirely. As far as it is possible, he should eat regularly, keep his body clean, and rest when he can so as to avoid over-fatigue. He

should keep his bowels in good condition and drink plenty of good, pure water. He should also try to clean his teeth after meals whenever this is feasible. When his garments have become wet from rain or snow, he should not lie down and sleep in them if this can possibly be avoided, and he should equally be careful not to lie down on the moist ground without sufficient protection. But, of course, on the firing line and in trenches and dug-outs these precautions cannot often be carried out and one must do the best he can.

If the air in the dug-outs and trenches seems to be vitiated, that is to say, foul and lacking oxygen, whenever circumstances will permit it the soldier should go where the air is pure and take some deep breathing exercises. The simplest one of all is to inhale deeply, raising the shoulders during the act of inhalation, moving them backward and remaining in that position, retaining the air for about 5 or 6 seconds, then exhale a trifle more quickly by moving the shoulders forward and downward. The accompanying illustration (fig. 6) will help to explain this exercise. Repeat this exercise 6 to 8 times and, if convenient, repeat it after half an lour or hour.

If the dug-outs and trenches can be ventilated to admit fresh air, this should by all means be done. In tents and barracks and all other sleeping quarters the soldier should, of course, make it his business to see that those habitations are always well ventilated. Fresh air by day and by night is the best preventative as well as curative agent of tuberculosis.

## What should the soldier do so as to not spread tuberculosis?

On page 175, the first symptoms of tuberculosis have been described. With these he should make himself familiar, and if he coughs and expectorates he should gather a specimen of his sputum and take it to the doctor

for examination. Until he has seen the doctor he should use all the precautions possible, that is to say, spit in a piece of cloth or in a receptacle which he should empty into the trench latrine, water closet, or drain. During the cough he should hold the hand before the mouth and should never swallow his expectoration.

If the soldier perceives any of the symptoms described, he need not think at once he has tuberculosis, but it is his duty as a soldier to report his condition immediately to the surgeon in charge of his company. He will then be carefully examined and proper care will be taken of him. If the ailment is not tuberculosis, the examination will make sure of it; if it is tuberculosis, the early diagnosis and timely treatment will save the individual's life; for let it be known right here that of all the chronic diseases human flesh is heir to none offer so favorable a chance for cure as does pulmonary tuberculosis if discovered early.

Should the American soldier in France greatly fear contracting tuberculosis after what has been said of the frequency of the disease among French soldiers and the French civilian population?

First of all, let us consider that even before the war the death rate from tuberculosis in France was twice as high as, for example, in New York City, that is to say, while in France three deaths out of every thousand of population were due to tuberculosis, in New York there were only one and a half per thousand. Brave and beautiful France had to mobilize a great army and had to do it quickly. The thorough physical examination, so essential for the discovery of tuberculosis, could not be made, and thus many a young man strongly predisposed had to enter the army in defense of his country. While military life even in trenches and dugouts may be conducive to the increase of strength and vigor in the normal and healthy individual, the stress and strain of the soldier's life in war time, long marches, life in trenches and dugouts, and the actual work on the firing line, will develop an active tuberculosis in the strongly predisposed, or in the one already afflicted with incipient tuberculosis, often at an alarmingly rapid rate.

This must be the explanation for the great frequency of tuberculosis among the fighting soldiers in France. though popular education against tuberculosis had been carried on some time before the war, it was not nearly so intensive and far reaching as in the United States. Thus, for example, in the United States we had 30 organizations doing anti-tuberculosis work in 1905. We have now 1400 different antituberculosis associations and committees. Dr. Biggs tells us "At the beginning of the war there were in the whole of France only 1000 sanatorium beds for tuberculosis and these were in private institutions. There were no provisions for the care of advanced cases excepting as they were received in the general wards of the general hospitals.' In the United States we have at this time 530 special tuberculosis sanatoria and hospitals with 35,-000 beds. Aside of that, we have 450 clinics and dispensaries for the treatment of cases which do not require or are waiting for institutional care. Of open air schools, which are little known in France, we have nearly 1000. Thus, there is in France a great scarcity of sanatorium and hospital accommodations for the tuberculous in the various stages of the disease with only a small number of tuberculosis clinics available for the treatment of early ambulatory cases.

Aside of the lack of preventive and curative institutions we must mention another factor responsible for the seriousness of the tuberculosis situation at this time in France. With all our love

for the French people, and particularly for our French brethren in arms, we must admit that as a whole they are not taught from their childhood the love of fresh air and the use of cold water as invigorating agents as is the average American boy or girl. This is the fault of their tradition, and their prejudice against the use of cold water and fresh and cold air by day and by night must be overcome in order to reduce the frequency of tuberculosis among the French people. Of course, the hardships this war has imposed upon the French civilian population, the deportation of many of them and the sufferings they had to endure during their enforced absence from home, is largely responsible for the fearful increase of tuberculosis among these people.

All the sad conditions which predispose the individual to tuberculosis either by heredity or custom, and those which are acquired by privation, want, lack of food and air, physical and mental suffering, have combined to increase the number of tuberculous individuals throughout France. Fortunately for the American soldier, his early training in the love of fresh air and the use of cold water on his body have made him naturally more resistant to the disease, and to the honor of our military surgeons it must be said that the examinations at the recruiting offices are most thorough so as to weed out those who are strongly predisposed to tuberculosis or already afflicted with the disease in the incipient stage. The examination is repeated after a few months training so as to make sure to have no tuberculous invalid in active service. yet, the possibility that some of our soldiers may develop tuberculosis must be admitted; but even should this occur, if the American boy serving now under arms in France will remember his obligation to his comrades, to him-

self, to his country, and to his allies and profit by these few words of advice, he will not be in great danger of the disease and will be well taken care of if he should get it. There are, as already stated, a large number of institutions which will take care of him on his return home. Many public and private sanatoria throughout the United States have offered to take care of any of the American soldiers who may be returned from France as tuberculous invalids. Do not be discouraged even if you should get a tuberculous infection. The disease is nearly always curable in the early stages.

## What can the American soldier, now in France, do to help in the fight against tuberculosis?

I have already stated in my short preface that this essay is not only written to protect our American boys, but also in the hope that by example and teaching they may help to combat this disease of the masses among their French comrades as well as among the citizens with whom they may come in contact.\*

Most French people and not a few Americans still fear the night air and are too much afraid of drafts as being most dangerous and the cause of catching colds. First of all, the practice of sleeping with the window open at night in winter and summer should be taught by example and by word of mouth or by printed instructions. But this must be done with great tact so as not to offend. These good people should be made to realize that night air is as good as day air and even purer, for as a rule there is less traffic, less commotion and less dust in the air at night. Drafts are only dangerous to the individual when he has perspired and the pores of his skin are open; at all other times drafts are beneficial, since air currents and winds tend to purify the atmos-Colds are never contracted phere.

<sup>\*</sup>A French translation will be available for distribution to their French comrades.

from drafts, but are due to infection just as much as tuberculosis, for all grippes and colds are due to certain specific organisms. The germ of the former is known under the name of pfeiffer bacillus and the latter by the name bacillus of catarrh.

It is in the closed and badly ventilated room where the ordinary germs of colds and influenza, measles, whooping cough and sometimes even the germs of pneumonia are spread by persons coughing into the air. We have already alluded to the precautions every individual should take during the act of coughing, no matter whether he thinks he is ill or not. Ordinary colds, grippe, measles, whooping cough, bronchitis, pleurisy and pneumonia are often the forerunners of tuberculosis and we should do all we can to prevent them by hygienic methods; we will thus reduce the frequency of tuberculous disease.

To clean the dust from furniture with the feather duster is still a favorite practice in France and in many American homes. It is in reality one of the most unhygienic ways of cleaning. It does not clean but simply causes the dust to settle in another place, and the people who dust as well as the people who live in the rooms cleaned by this method are subject to inhaling the dust which in many instances is not free from disease producing germs. It may be said that the same conditions result from dry sweeping of rooms or corridors. Cleaning furniture with a moist or slightly oily cloth is far more hygienic and more effective.

To avoid the possibility of becoming infected or infecting others, you should never kiss any one, especially not a child, on the mouth. The French custom of kissing on the cheek is far more hygienic. Do not swap eating or drinking utensils, and see that they have always been thoroughly cleaned before use.

Any one who has never used a cold water bath and is fearful of not reacting, that is to say, of not getting warm again after its use, can easily become accustomed to this health giving measure by beginning to take his cold water applications in the morning in the following way: Stand in a tub containing moderately hot water a few inches in depth and have within easy reach a washbasin full of cold water in which a large sponge has been placed. Squeeze out the sponge full of cold water rapidly over the back, holding it at the neck, then in front over the throat, and over each shoulder in the same manner so that the whole body receives an ablution of cold water. Dry yourself quickly, not necessarily very thoroughly, and return to the bed for a few minutes, which had been covered after leaving it so as to retain the warmth. Reaction is thus absolutely assured. By this method any individual can train himself to the use of a cold ablution, showerbath, douche, or cold plunge.

In most parts of France there is even a prejudice against drinking water. Now it should be distinctly understood that next to fresh air there is perhaps no greater factor in keeping man well and strong than a plentiful ingestion of pure water. A moderate quantity (about a glassful) with meals and two glasses between mealtimes is most conducive to good health.

If the American soldier should come in contact with any comrade or man or woman of the civilian population in whom, because of the study of this little brochure, he should recognize the symptoms of a tuberculous disease, let him urge his friend to see a physician and institute such precautions as are necessary to avoid the possible conveyance of the disease to others.

In most American communities, every case of tuberculosis is reported to the health department, whence the physician, if he so desires, can obtain literature which will enlighten the patient and his friends as to the best methods of prevention and cure. In the United States there is usually a large corps of trained nurses attached to the health departments for the purpose of visiting the tuberculous poor, teaching them practical hygiene and seeing that the physician's directions for food and medicine can be and are carried out. If the people are too poor to obtain good and nutritious food, special tuberculosis committees attached to charity organization societies help to obtain it.

What are the agencies now at work to help the French soldier who may have contracted tuberculosis?

The Rockefeller Foundation has sent a tuberculosis commission to France composed of expert diagnosticians, sanitarians and trained nurses, under the leadership of Professor Livingston Farrand, formerly the executive secretary of the National Association for the Study and Prevention of Tuberculosis, and Dr. James Alexander Miller. Director of the tuberculosis service of Bellevue Hospital, New York City. In co-operation with the American Red Cross and the French authorities they will foster an educational campaign and establish tuberculosis dispensaries. preventoria, sanatoria, special hospitals and agricultural colonies. In the sanatoria and hospitals the unfortunate French soldiers who have contracted tuberculosis may be taken care of. In these institutions they will not only have an opportunity to recover but will learn by practical demonstration what to do and what not to do to prevent reinfecting themselves or infecting others, and the surest and best way to regain their health and strength and become fit to enter the ranks again. On returning home they will be useful citizens and will teach others by their example what to do so as not to contract and spread tuberculosis.

What may we hope for regarding the tuberculosis problem in all civilized countries after the successful issue of this war of democracy against autocracy?

Since tuberculosis is as much a social disease as it is a medical disease. the prospect of combating the social causes will be brighter when militarism and autocracy will have disappeared from civilized countries. The countries which are now the enemies of the Allies will also become democratized and there will be a united Europe as there is now a united America. Social justice will then reign supreme and the countless billions of dollars con be devoted to the betterment of the social conditions of all peoples that now are spent for maintaining fighting armies because one country would not consent to disarmament but wished to dominate the world by brute force and uphold the maxim that might makes right. Medical science will then once more be able to devote all its energy to the prevention of diseases. All other branches of science, now utilized in the practice of war, will likewise be consecrated to the betterment and advancement of human happiness, comfort, health, and the enjoyment of life, and with these blessings attained the disease which has justly been called the great white plague, one of the greatest enemies of mankind, will also disappear. Thus in the end the sacrifices of life, property and treasures beyond price made by millions of brave men, women and even children will surely lead to a higher civilization where lasting peace on earth and good will toward all men will reign supreme.

Dr. Arthur H. Sutherland, recently of Yale University has come to Los Angeles and accepted the position of Psychologist in the public schools and is already making a psychological survey.



A MEDICAL, CLIMATOLOGICAL AND SOCIOLOGICAL MONTHLY MAGAZINE.

This journal endeavors to mirror the progress of the profession of California and Arizona.

Established in 1886 by Walter Lindley, M.D., LL.D. DR. GEORGE E. MALSBARY, Editor and Publisher.

Associate Editors,

Dr. Walter Lindley, Dr. W. W. Watkins, Dr. Ross Moore, Dr. George L. Cole, Dr. Cecil E. Reynolds, Dr. William A. Edwards, Dr. Andrew W. Morton, Dr. H. D'Arcy Power, Dr. B. J. O'Neill, Dr. C. G. Stivers, Dr. Boardman Reed, Dr. W. H. Dudley, Dr. J. M. Mathews.

Address all communications and manuscripts to

EDITOR SOUTHERN CALIFORNIA PRACTITIONER,

Subscription Price, per annum, \$2.00. 1414 South Hope Street, Los Angeles, Cal.

#### EDITORIAL

#### AU REVOIR DR. REA SMITH ET AL.

On Thursday evening, November 8th, one hundred and twenty-five representative physicians and surgeons gave a dinner at the Los Angeles Athletic Club in honor of Dr. Rea Smith, surgeon director the United States Base Hospital No. 3. Besides Dr. Smith the following members of his unit were present:

Surgeons with rank of Lieutenant Commander, E. L. Crispen (Medical), Guy Cochran (Surgical); Passed Assistant Surgeons with rank of Lieutenant. W. W. Richardson (Orthopedist), Lewis Morton (Surgical), Frank Miller (Eye, Ear and Throat), J. C. Ferbert (Surgical), J. Rea Cowan (Laboratory). A. T. Charlton (Surgical), Phil Boller (Surgical); Assistant Surgeons with rank of Junior Lieutenant, J. L. Schwartz (Medical), Victor Parkin (Neurologist), W. H. Olds (Surgical), Mark Kelsey (Dental), Louis Josephs (Surgical), R. W. Homer (Surgical), A. R. Dickson (Medical), John W. Crosson (X-ray), E. E. Burk (Surgical). The banquet hall was beautifully decorated and an excellent orchestra greatly added to the pleasure of the evening.

Dr. Walter Lindley was toastmaster. Toasts were drunk to the president of the United States; to Dr. E. R. Smith, father of the guest of honor, who was confined to his bed with illness. There was also great enthusiasm when a toast was drunk to Mrs. W. A. Edwards who has been for many months the acting president of the Los Angeles Red Cross. Mrs. Edwards has given all of her time for over two years to working for the Orphans of France and to the Red Cross work.

A letter of felicitation was received from mayor Fred T. Woodman. Mr. A. R. Peck, who has been collecting an emergency fund for the unit. was present and said a few words. Mr. M. J. Connell, who was to have been present, was unable to be there. The toastmaster stated that Mr. Connell, at the time when the organization of the unit was just beginning, tele-

graphed to the authorities at Washington, D. C., personally guaranteeing the \$45,000 necessary for its equipment. Mr. Connell himself collected from friends \$23.000 of this amount. Geo. Davidson, rector of St. Johns church, delivered a most eloquent and patriotic ten minute address. Dr. H. P. Barton, Dr. J. C. Ferbert and Dr. W. G. Cochran spoke briefly in appreciation. W. P Eaton, secretary of the Red Cross, read a concise statement of the work that was being done locally. Dr. J. B. Jarvis Barlow read a paper, describing his position and work as National Red Cross Medical Committeeman. Dr. Chas. W. Anderson, who has just returned from a year's experience in the British Army as Surgeon at a Base Hospital, seventeen miles from Boulogne, France, was introduced, and was received with great enthusiasm, the audience standing and giving three times three. Dr. Anderson made a most interesting and modest talk, showing the metal helmets worn by the British and those worn by the Germans. He also put on one of the masks used by the Allies as a protection against gas, and described the method by which it is used. He had with him many interesting relics of the war.

Congressman H. Z. Ozborne spoke in regard to the work of Congress, and the great responsibility that they shared with the President of the United States.

Dr. Smith was the last speaker and spoke briefly in his usual modest manner. The impressive evening closed by all joining in singing "Auld Lang Syne," led by Dr. A. L. Macleish.

The Los Angeles Aviation Examining unit has been working together for five weeks during which time it has examined about 125 candidates for flying. The examinations are made daily except Saturday at the Post Graduate Medical Department of the University of California, 737 North Broadway. Dr. W. H. Roberts of Pasadena, Capt. M. R. C. has been put in command and has associated with him twenty local physicians who give their time gratis to this service. Following is a list of the doctors comprising the examining unit. Ear, Nose and throat: Hill Hastings, C. H. Montgomery, C. G. Stivers, J. M. Brown, F. S. Detling, C. R. K. Swetnam. Ophthalmologists: W. H. Dudley, George H. Kress, F. D. Bullard, A. L. Kelsey, L. W. Mansur, Geo. Knapp. Internists: Bertnard Smith, J. R. Cowan, Chas. E. Carter, A. B. Perkey, R. L. Cunningham.

The official standard Jones modification of Barany's chair for testing the equilibrium is used.

#### EDITORIAL NOTES

Dr. G. A. Broughten has been elected County Health Officer of Oxnard.

Dr. Julia Blanche Weaver has returned to Los Angeles, after spending several months in Eastern Hospitals.

Dr. E. H. Williams will have charge of the practice of Dr. Ross Moore, of 718 Brockman Building, during Dr. Moore's service in the United States Army. The citizens of Baldwin Park, about fifteen miles from Los Angeles, are anxious to have a physician locate in their midst.

Drs. Johnston Clark and Wickett of Anaheim, have moved their offices from the Anaheim Sanitarium and have occupied for their offices another building. The Sanitarium is crowded to overflowing with patients. Dr. F. Gramenz, formerly of Albert Lea, Minn., has located in Long Beach. He devotes himself to the treatment of eye, ear, nose and throat.

The State Board of Medical Examiners held an examination in Los Angeles the first week in October. Over two hundred physicians went through the ordeal.

Dr. C. J. Johannesson of San Diego has received his commission as First Lieutenant in the United States Army. He is a graduate of the University of Copenhagen.

Dr. A. B. Wessells, of San Diego, who recently received his commission as First Lieutenant in the Medical Reserve Corps of the Army, is now stationed at Ft. Oglethorpe, Ga.

Dr. John P. Gilmer, chief surgeon of the City Receiving Hospital, has offered his services free to striking union men and their families. "There is too much suffering that is needless when men are out on strike, and I want you men to feel that medical attention is yours for the asking. The members of your families particularly are welcome to my services," Dr. Gilmer told labor leaders.

Dr. Granville MacGowan was toast-master at a banquet on the evening of October 30th, at which fifty prominent physicians of Los Angeles were guests. The object of the gathering was to unite more intimately, the medical department of the University of Southern California, and of the State University. Deans Kress, and Bryson and others, spoke earnestly in favor of such union.

It is almost entirely due to the work of this association that on October 22, Governor Stephens appointed the following as members of the board of trustees for the Pacific Colony, to be established in Southern California for the care and instruction of feeble-

minded and epileptic persons: Newton W. Thompson, of Alhambra, Mrs. J. Powers Flint, of Los Angeles, and Mrs. Mary Roberts Coolidge of Berkeley. The law providing for the colony carries an appropriation of \$250,000 for a site, buildings and maintenance.

The total of 2,172 were treated at Psychopathic Hospital, connected with the Los Angeles County Hospital during the year, ending July first. This branch of the County hospital has proven a great blessing and Mrs. W. S. James, Secretary of the Psychopathic Association of California, deserves great credit for her forceful and successful efforts in having it established. At a recent meeting of this association the following named persous were elected to serve on the executive beard of the asso-'ciation: Judges Curt's J. Wilbur, Sidaey'A. Raeva, Paul' J. McCormick and Franklin Booth, Doctors H. G. Brainerd, C. L. Allen, E. H. Williams and Mmes. W. S. James, J. P. Flint, O. P. Clark and Dr. Thomas Orbison. The first meeting of this association was held on October 19, 1910, at the home of Mr. and Mrs. James. The gathering met to "bring together a group of representative citizens to aid the mentally afflicted, and to establish a home for the feeble-minded and epileptic."

Drs. J. C. King, of Banning, H. R. Martin and J. G. Baird, of Riverside, presented the program at the monthly session of the Riverside Medical Society at the Elks club house, October 8th. Dr. King talked on "Rattlesnake and Spider Bites." Dr. Martin entertained the members with a review of his summer experiences at Mavo hospital, where he went for special work, and Dr. Baird told of the annual meeting of the state, county and city health officers, which he attended recently at Santa Rosa. Dr. Arthur E. Strong, who has been secretary-treasurer of the society, tendered his resignation, and

Dr. Paul E. Simonds was elected to fill the office. Dr. Strong has accepted a position at the state hospital at Norwalk, where he will be assistant physician. He will leave next Monday to take up his new work. Mrs. Strong will not go down until Christmas or a little later.

Dr. W. Boardman Reed, age 75 years, graduate of the Medical Department of the University of Pa., class of 1878, died at his residence in Alhambra, near Los Angeles, on October 31, 1917. The body was cremated at the Alhambra Crematory. He leaves a widow, Mrs. Gertrude Phelps Reed, and one daughter, Mrs. H. J. Hogle, and a con, ff.

Phelps Reed, a prominent real estate operator of Alhambra. Dr. Reed was one of the men who took a prominent part in the settling and development of Atlantic City, N. J. Dr. Reed devoted himself principally to diseases of the stomach and was called in consultation far and near. He was the author of quite a number of well known medical works. His volume on "Diseases of the Stomach," being considered by the profession as authority on that subject. He came to Ios Angeles fifteen years ago and although in later years leading a very quiet life, yet he had Andeared himself to the profession of California.

#### BOOK REVIEWS

THE PRESCRIPTION Therapeutically, Pharmaceutically, Grammatically and Historically considered. By Outo A. Wall, Ph.G., M.D., Professor of Materia Medica, Pharmacognosy and Botany in the St. Louis College of Pharmacy, etc., etc. Fourth and revised edition. St. Louis: C. V. Mosby Company. 1917. Price, \$2.50.

This work covers quite thoroughly The Prescription. It sets forth clearly and distinctly practically everything connected with the subject, and is probably the most scholarly and comprehensive presentation of it in print. The previous edition had been exhausted for some years, and we are glad to see this edition, in which parts have been rewritten and amplified, presenting the subject more completely and attractively than heretofore.

INTERNATIONAL CLINICS. Edited by H. R. M. Landis, M.D., Philadelphia. Volume III, twenty-seventh series. 1917. Philadelphia and London: J. B. Lippincott Company.

This issue contains the usual number of excellent monographs, but none provided more interesting reading than that on Food Inspection in Cincinnati, written by J. H. Landis, M. D., the Cincinnati Health Officer in fact as

well as verie. You must read it for yourself, for any attempt at abstracting or description would be unsatisfactory.

V 11,2

A REFERENCE HANDBOOK OF THE MEDICAL SCIENCES, Embracing the entire range of Scientific and Practical Medicine and Allied Sciences. By various authors. Third Edition. Completely revised and rewritten. Edited by Thomas Lathrop Stedman, A.M., M.D. Complete in eight volumes. Volume eight. Illustrated by numerous chromolithographs and three hundred and thirty-seven half-tone and wood engravings. New York: William Wood and Company. 1917.

This volume completes the third edition of the Reference Handbook. It contains 676 pages of text and 106 pages devoted to an index of the series. The Handbook is so well known that description is superfluous. The profession is fortunate in having a new edition appear at this time, when the world conflict makes publishing so difficult. The successful culmination of the undertaking, marked by the appearance of this final volume, is a fitting monument to the zeal of the publishers and the able editor. It will be a standard work for years to come.



Vol. XXXII.

LOS ANGELES, DECEMER, 1917

No. 12

DR. GEO: E. MALSBART.

Associate Editors,
Dr. Walter Lindley, Dr. W. W. Watkins, Dr. Ross Moore, Dr. George L. Cole,
Dr. Cecil E. Reyndds, Dr. William A. Edwards, Dr. Andrey W. Morton,
Dr. H. D'Arcy Power, Dr. B. J. C'Neill, Dr. C. G. Stivers, Dr.
Boardman Reed, Dr. W. H. Ludley, Dr. J. M. Mathews.

#### NEW CHARACTERS AND DEVELOPED CHARACTERS.

BY CASPER L. REDFIELD, CHICAGO, ILL.

A text book on the principles of breeding has the following:

"The appearance of a positively new character in any of these races would be cause for profound astonishment. Under the present state of knowledge, and for our purposes, we may say that there are no such things as acquired characters, in any proper sense of the term. It is a figure of speech at best, and a most unfortunate one, at that."

High speed at the trot is a new characteristic in horses, and one which never existed in any breed of horses until forced there by the art of man during the nineteenth century. In horses, the natural high speed gait is the running gait, and, until very recently, any horse pushed for speed would invariably break into a run. Now we have "natural born trotters" which will stick to the trot, no matter how hard they are forced.

This new characteristic did not arise as a variation or mutation, in the ordinary or proper meaning of those terms, and selection had nothing to do with its origin or its development. It is strictly an acquirement which has be-

come inherited, and we may trace that acquirement and inheritance, step by step, back thru a century of time. I have published in journals devoted to horse breeding the details of that process of acquirement, and have summarized the evidence in Dynamic Evolution.\* There is room here for only a general statement of the process. In passing it may be remarked that the statements made are based on an investigation of the thing itself, and are not deductions based on other and unrelated matters.

High speed at the trot demands greater power than high speed at the run. Hence, the first thing necessary in getting high-speed trotters is to get into the animals a power which they did not have before. That thing was done, but it was not done by professional horse breeders, or by any persons who had anything more than an incidental connection with horse breeding. It was done by farmers, by sports, by gamblers and by reckless individuals who made nuisances of themselves in their communities. The first information that the professional breeders had

of this matter was the discovery of trotting power in the progeny of Hambletonian 10.

Hambletonian was a coarse horse of poor conformation, and his progenitors for several generations were the cheapest kind of cheap stock. But we can trace, thru a period of sixty-nine years, and the lives of twelve separate and distinct animals, the exact process by which his special qualities were produced. That process consisted in forceing each one of those twelve animals to do an extraordinary amount of work before reproducing. This work was principally trotting work, mixed with a small amount of running work. But whether trotting work or running work, that work developed and hardened the muscles of those horses so that each one of the twelve had acquired much physical strength by its own work before reproducing. That work was hard work all of the time, and summing up the total amount of time put in by those twelve animals we find that it aggregates one hundred and five years more than is normal or average in ordinary horse breeding operations.

Hambletonian is called the founder of the trotting stock because he was the principal source from which breeders obtained their supply of improved animals, but he is not the only source. A second source was in Mambrino Chief, and minor sources may be found in Justin Morgan and several others.

When we examine the pedigrees of these other horses we find that they originated from cheap stock by extra work continued for several generations, but which work was not so extreme as in the case of Hambletonian.

Following Hambletonian there has been much further improvement in trotters, but none of that improvement came thru any son or any daughter of Hambletonian which was selected by breeders for breeding purposes when

those sons and daughters were young or in an undeveloped condition. It came thru those sons and those daughters which were first discarded by breeders as unfit for breeding purposes, and which consequently had to work hard for their oats first and were bred afterwards. The greatest of the improvements came thru those particular sons and daughters which were worked hardest and longest before being bred, and it came to a less extent thru those which were not worked quite so hard or quite so long. But the improvement in trotting power never came unless the animals of each successive generation were worked more than the normal amount before being bred.

The hard work from generation to generation was the origin of the power to trot. Causing the horse to stick to the trot at high speed was the product of education continued from generation to generation. The horses of each generation were taught to trot to their utmost ability and not break into a run. They were driven hard, and whenever one would break into a run under pressure, he was instantly stopped and started over again. As a result of that education continued from generation to generation we now have trotters which do not need to be educated on that point. They are born with the disposition to stick to the trot under all circumstances, and that disposition exists only in descendants of those which were extensively educated on the point. That education is a mental one just as well as it is a physical one. It is a case of a new "instinct" being implanted in an animal by intensive education extending over from five to ten generations.

What is true of these qualities in the horse is true of the mental power and mental characteristics of man. Human intelligence has been increasing in the past, and is increasing now. We of

today are mentally superior to our ancestors of a thousand years ago. One evidence of that superiority may be seen in the fact that we make inventions, whereas our ancestors of a thousand years ago did not make inventions. An invention is not the product of accumulated knowledge of the past. Anything which is such a product lacks those particular qualities which make it an invention. To be an invention, an improvement must rise above all past knowledge, and all ordinary deductions from past knowledge. Unless it does these things it is not an invention.

Real inventions are not restricted to those things recognized by our patent laws. They extend to things in literature, art, science, business and the general affairs of life. When a man by pioneering thought produces something distinctly new and radically different from what would be produced by another man highly educated in the line to which the new thing pertains, then that man has made an invention, no matter what that thing may be. In this broad sense, the people of the United States are producing hundreds of inventions every day. A thousand years ago the entire world did not produce as many inventions in a century as we now produce in one day in the United States alone.

There have been hundreds of famous trotters and famous progenitors of trotters. From records we can write out detailed pedigrees of each of these famous animals, and from records we can get detailed histories of the parents, the grandparents, the grandparents, the grandparents, and earlier ancestors. From these things we can determine exactly what conditions produced each animal, and a determination so made is vastly more reliable than the dictum of some man who never investigated the matter. Those records tell a very definite and precise story, and that story is a story

of work. Improvement comes thru work in previous generations, and it comes in no other way. The assumption that these remarkable animals were mutations represents a false theory based on ignorance.

We have had in this world many eminent men. Some of these men were simply men of learning, but more were pioneers in human thought. As such pioneers they were inventors who made inventions in art. science, literature, etc., as well as in mechanics. They were men of unusual ability, and while they all had pedigrees, we cannot trace the pedigrees of eminent men to the same extent that we can horse pedigrees. Still in hundreds of cases we can get definite and precise information about parents and grandparents, and sometimes about great-prandparents.

The information obtained in haman pedigrees corresponds exactly to what is found in horse pedigrees. They were products coming from successive generations of educated and mentally well developed ancestors. They did not come from ancestors who were young when they reproduced in the line leading to the eminent man. Neither were they from ancestors who were mentally undeveloped by reason of mental inactivity.

Are there no exceptions? It is a wise man who knows his own father, and in the hundreds of cases investigated it looks as if there were two men who did not know their fathers. One of these was an acknowledged illegitimate. The other stands apparently as a solitary contrary case. But to believe that the man knew his own father is to believe that Nature will sometimes violate laws which are never found to be violated in cases in which the records are above suspicion.

No, there are no exceptions. The human race is improved from genera-

tion to generation by increasing the mental and physical powers of the individuals who compose the race. I have stated, as the result of a direct investigation of the thing itself, that increase in inherited powers comes from causing parents to develop those powers by exercise before reproducing and it comes in no other way. I have published the results of investigations into thousands of cases, and have challenged anyone to produce a single contrary case at all comparable in completeness of analysis to that which I have given to hundreds of positive cases. That challenge was backed by \$1,000 deposited with the American Genetic Association, the money to be paid out when that one contrary case was shown. The Association kept the money for more than a year and a half, and then returned it. Improvement in mental and physical power comes by inheritance of acquirements made by parents before reproducing, and comes in no other way. No one could find an improvement coming some other way.

In this connection it is proper to call attention to what an "acquired" character is, as distinguished from a "thrust" character. When Weismann cut off the tails of mice he exercised certain muscles of his hands and arms, and that exercise developed those muscles. That development was an acquirement. Taillessness was something thrust upon the mice and not something acquired. Acquired characters are inherited; thrust characters are not. The biologists have been investigating thrust characters and calling them acquired characters. Nowhere in there literature is there an example of a biologist investigating the inheritance of acquirements or making any effort to do so. They have no information on the subject other than what I have furnished 325 Monadnock Block.

## SPONTANEOUS PNEUMOTHORAX IN ARTIFICIAL PNEUMOTHORAX

Marshak and Craighead, of Edgewater, Colorado, review the cases in the literature of spontaneous pneumothorax occurring during the course of induced pneumothorax and add two cases of Doctor Wm. N. Beggs, of Penver, and four of their own. In their paper in the November number of the American Review of Tuberculosis they call attention to the fact that the symptom complex in these cases is a fairly constant one. There is invariably pain on the collapsed side with marked dysphoea and sudden rise of temperature which may be increased from normal to 102° F., or even to 104° F., within a few hours. They find the most helpful procedure in verifying the diagnosis to be the introduction of the pneumothorax needle. There is usually a high positive intrapleural pressure of as much as +40, +90, mm. of water, even though the last reading on the previous injection was low or negative. To explain the occurrence of the complication they concur with the theory of Beggs, who calls attention to the fact that after gas has been introduced into the pleura the usual support given the lung by the firm chest wall is replaced by that of a flexible body of gas and that weak spots in the lung would therefore give way more easily during strain and cough. As treatment they advise the relief of pressure by aspiration as often as may seem necessary but allowing sufficient gas to remain to keep the lung collapsed without embarrassing the patient, provided the opposite side still seems able to do the necessary work and shows no evidence of breaking down.-Marshak, M. I., and Craighead, Jos. W.: Spontaneous Pneumothorax During the Course of Induced Pneumothorax, Am. Rev. Tub., 1917, Vol. 1, No. 9.

<sup>\*</sup>Published by G. P. Putnam's Sons, New York.



A MEDICAL, CLIMATOLOGICAL AND SOCIOLOGICAL MONTHLY MAGAZINE.

This journal endeavors to mirror the progress of the profession of California and Arizona.

Established in 1886 by Walter Lindley, M.D., LL.D. DR. GEORGE E. MALSBARY, Editor and Publisher.

Associate Editors,
Dr. Walter Lindley, Dr. W. W. Watkins, Dr. Ross Moore, Dr. George L. Cole,
Dr. Cecil E. Reynolds, Dr. William A. Edwards, Dr. Andrew W. Morton,
Dr. H. D'Arcy Power, Dr. B. J. O'Neill, Dr. C. G. Stivers, Dr.
Boardman Reed, Dr. W. H. Dudley, Dr. J. M. Mathews.

Address all communications and manuscripts to EDITOR SOUTHERN CALIFORNIA PRACTITIONER, Subscription Price, per annum, \$2.00. 1414 South Hope Street, Los Angeles, Cal.

#### **EDITORIAL**

#### A STALWART GONE.

#### DEATH OF DR. E. R. SMITH.

Dr. Everett Russell Smith, age 71, died on Saturday evening, Nov. 17th surrounded by the members of his family, consisting of his devoted wife, his son, Dr. Rea Smith, his daughters, Mrs. Geo Martin and Miss Rose Smith. Dr. Smith was born at Bristol, Vermont, Nov. 8th, 1864. He graduated from Rush Medical College, Chicago, and took up his residence at Rockford, Ill. Here he practiced until 1887. He then came to Los Angeles, where he has been one of the leading men in the medical profession during the last thirty years. He was deeply devoted to his work, and the only position he has held of a public or semi-public nature, has been that of vice-president and president of the California Hospital, of which institution he was one of the founders. His ability as a surgeon and general medical adviser was unquestioned and unsurpassed. He had a clear intellect, was a constant student, and always displayed cool judgment at the bedside. Ethically, he was absolutely fair to his fellow practitioners and commanded the high regard of all with whom he was associated. In December, 1912, he retired from active practice and on this occasion was given a banquet at the California Club. There were about 100 present; it proving to be an occasion that will be ever memorable in the annals of the medical profession of Southern Culifornia. As his summer vacations, he went hunting and fishing among the creat mountains and lakes of the Pacific Coast. The last few summers he has had delightful times at the Flat Rock Club, which is on the border of Yellowstone Park. He took great delight in reading the very best literature. During his last days he would often have Lavengro, by George Borrow, in his hands, which he was then reading for the third time.

He was a member of the St. John's Protestant Episcopal church. His funeral was largely attended. The pall-bearers were the medical men belonging to the Naval Hospital unit of

which his son, Dr. Rea Smith, is the head.

The honorary pall-bearers were 14 of his old associates, among them Dr. W. G. Cochran, who had not only been Dr. Smith's closest friend during the 30 years in Los Angeles, but had also been his fellow practitioner back in Illinois. The long continued friendship of these two well known men, is delightful to contemplate. In losing Dr. Smith from their numbers, the medical profession is deprived of a man of sterling qualities, a surgeon of great ability, and an upright citizen who always did his full duty.

#### TO OFFICERS OF THE MEDICAL RESERVE CORPS U. S. ARMY INACTIVE LIST.

Word received from the Surgeon General of the U. S. Army, conveys the information to officers of the Medical Reserve Corps of the United States Army, inactive list, that assignment to active duty may be delayed, and that they are advised to continue their civilian activities, pending receipt of orders. They will be given at least 15 days' notice when services are required.

#### FEDERAL TRADE COMMISSION ACTS ON SALVARSAN PATENT

The Federal Trade Commission today entered orders for licenses to three firms to manufacture and sell the product heretofore known under the trade names of "Salvarsan." "606," "Arsenabenzol," "Arsaminol," patent rights which have been held by German subjects. The orders for licenses are subject to acceptance and agreement by the licensees to the stipulations made by the Commission. Upon such acceptance and agreement, licenses Nos. 1, 2 and 3 will be formally granted by Secretary L. L. Bracken, acting for the Commission.

Hereafter, this important drug will be manufactured and sold under the name of "ARSPHENAMINE."

The Trade Commission's action was taken under Section 10 of the Trading With the Enemy Act under direction of Commissioner Fort, upon recommendation of C. H. McDonald, Edward S. Rogers and Francis Phelps, in charge of granting such licenses. The Public Health Service has prepared rules and standards for the manufacture and testing of "Arsphenamina" and will supervise its manufacture, authority having been conferred on the Public Health Service by the Secretary of the Treasury, and the observance of the rules and standards become a condition of the license.

The three firms which will be hereby permitted to manufacture and sell "Arsphenamine" are Dermatological Research Laboratories, of Philadelphia, Takamine Laboratory, Inc., of New York, and Farbwerke Hoechst Company (Herman A. Metz Laboratory), of New York. The original patent for manufacture of what has heretofore been known as "Salvarsan," etc., was issued to Paul Ehrlich and Alfred Bertheim, German subjects and assigned to Farbwerke Vormals Meister, Lucius and Bruning of Hoechst on the Main, Germany.

The supply of the drug now licensed to be made in America, up to 1915, was almost exclusively obtained by importation from Germany. It is at present the only known specific for virulent blood poison. From the outbreak of the war importation became more difficult.

Before the war began, the patented drug was sold at \$4.00 per dose which is approximately \$3500 per pound, and speculatively it has brought as high as \$35.00 per dose. While the price of the product is not fixed at this time by the Commission, the right to fix

prices is retained, and a price of \$1.00 per dose to the Army and Navy, \$1.25 per dose for hospitals, and \$1.50 per dose for physicians, are the prices at which some, at least, of the licensees have stated that they intend to offer the licensed drug.

The enormous shortage of supply on this important product will immediately be relieved, and the article placed in the hands of the Government, the hospitals and the medical profession at a price lower than ever before.

#### LIBERTY SWEETS.

Our allies, particularly France and Italy, are dependent on the American sugar bin, and the bottom of the bin is now in sight. According to the last official survey of the situation, stocks are largely depleted in the United States and in those countries from which we get the bulk of our sugar, conservation of which is as necessary in the national war emergency as conservation of meats, fats and wheat products.

Do these business facts mean curtailment of Christmas candy? Should it be omitted from the Christmas box for the soldier in camp, the boys and girls at school and from the little one's stockings? Yes, if we are to create a surplus for the millions of men on the firing line, the United States Food Administration for California says. A clever combination of fruits and nuts made with brown sugar and syrups of various kinds, however, may be substituted for candies. Such sweets keep well, are universally liked, and are wholesome.

The experts of the California food administration have prepared a few recipes for these ''liberty candies,'' as follows:

Popcorn Candy.—For making popcorn candy either honey, maple syrup, molasses, or corn syrup may be used. To one cup of syrup allow one tublespoon of vinegar. Boil together until syrup hardens when dropped into cold water. Pour over freshly popped corn and mold into balls or fancy shapes for the Christmas tree.

Bitter-Sweets.—An attractive variety of candies may be made by dipping sweet fruits in bitter chocolate. Use for this purpose dates, citron, candied orange peel or crystallized fruit. Melt unsweetened chocolate in a double boiler. Keep the chocolate just warm enough to prevent solidifying. With a silver fork drop pieces of fruit in chocolate. See that each piece is completely coated, then remove to waxed paper to harden.

Stuffed Dates.—Remove the stones. Fill with peanuts, walnuts, hickory outs or any nuts available. Peanut butter makes a good filling that is different. Press dates in shape and roll in granulated sugar, chopped nuts or a mixture of cocoa and powdered cinnamon.

Chocolate Dainties.—Put through the meat chopper one-half cup each of dates, figs and nut meats. Add one tablespoon orange juice, a little grated orange peel, and one square of melted unsweetened chocolate. Mould into balls and roll in chopped nuts or granulated sugar. This mixture may be packed in an oiled tin, put under a weight until firm, then cut in any shape desired.

Maple Creams.—Boil one cup maple sugar with one cup water until it forms a soft ball when dropped in cold water. Remove from the fire and stir rapidly until it becomes creamy. Form into balls the size of marbles and put nut meats on either side. Lay on wax paper to cool.

Fruit Paste.-Put through the meat chopper enough cherry, peach or quince preserves to make a ham-pint with the juice. Heat fruit and add two tablespoons of gelatine, previously softened in a very little cold water. Stir well, and continue stirring until it begins to cool and thicken, then pour into oiled dish to make a layer one inch thick. Let dry slowly, sprinkle with sugar and place in box with waxed paper between the layers. A mixture of dried apricots and dates may be used for this paste. Wash apricots and soak over night in enough water to cover. Pour off water, bring to a boil. pour over apricots and let stand till cool. Put apricots and dates through a meat chopper and proceed with the proportions as given.

#### EDITORIAL NOTES

Dr. B. V. Ward has located in San Fernando.

Dr. Frank B. Morrill has located in Long Beach.

Dr. H. A. Barclay, formerly of Colorado, has located in Culver City.

Dr. B. V. Hall, after an absence of some years, has again located in Whittier.

The Los Angeles Medical Association admitted, October 22, 1917, the following new members:

Dr. Webster F. Keller, Box 66, Van Nuys, Cal.; Coll., Ohio-Miami, Univ. of Cincinnati, class 1913; Endorsed by Drs. Ernest E. Roberts, Sawtelle, Cal., and Howard Anderson, M. D., 6778 Hollywood Blvd., Los Angeles.

Dr. Walter E. Baker, 2935 W. 14th Street, Los Angeles; Coll., Drake Univ., Des Moines, Iowa, class 1907; Endorsed by Dr. Alfred A. Rogers, 212 Hamburger Bldg., and Charles Burnside, M. D., 1101 Title Ins. Bldg., Los Angeles.

Dr. Maria C. Wells, 1943 Vista Del Mar, Los Angeles; Coll. University of Sou. Cal., Physician and Surgeon, 1917; Endorsed by Drs. Katherine Cloud, 818 Inv. Bldg., Los Angeles, and Lyie G. McNeile, M. D., 626 Marsh-Strong, Los Angeles.

Dr. M. J. Abramson, 520 Lissner Bldg., Los Angeles; Coll. P. & S., U S. C., 1911; Endorsed by Drs. Henry Herbert and P. C. H. Pahl.

Dr. A. Feldman, 733 Investment Bldg., Los Angeles; Coll. P. & S., U. S. C., 1916; Endorsed by Drs. Chas. F. Nelson and John V. Barrow.

Dr. Ruth Purcell, 926 Marsh-Strong Bldg., Los Angeles; L. A. College of Medicine, U. C., 1917; Endorsed by Drs. William Lemoyne Wills and Titian Coffey.

Dr. R. H. Shippey, Long Beach, Cal.; St. Louis Univ. (Med. Dept.), 1906; Endorsed by Drs. F. L. Rogers, Long Beach, Cal., and W. L. Dickerson, Long Beach.

Dr. Simon Flexner has announced that the injection in the veins of a 4% solution of ordinary epsom salts would cure Tetanus.

Dr. Caesar G. Cahen, of Los Augeles, has arrived safely in Paris, and will immediately enter upon active work in connection with the war.

Dr. Marcia A. Patrick has been appointed assistant Health Commissioner of Los Angeles. She will have charge of the tuberculosis clinic in the Temple Block.

WANTED—Capable salesmen to sell to the medical profession a standard and nationally advertised line of pharmaceuticals. Liberal commission. WESTERN CHEMICAL CO., lnc., Hutchinson, Minn.

Dr. Rexwald Brown, of Santa Barbara, was taken sick in Baltimore, on his way to France. He was hurried to the Johns Hopkins Hospital where he underwent an operation, the character of which we have not learned.

The profession of Southern California was sadly shocked on Saturday, November 24th, to hear that the death of Dr. Claire W. Murphy had occurred that morning after a very brief illness. Dr. Murphy was forty-seven years old, a graduate of the Medical Department of the University of Southern California and was probably the most thorough Anatomist that the Pacific Coast has produced. He was also, locally, an authority in pathology. As a surgeon his judgment was good, and he had been called in consultation thou-

sands of times. With all of this ability he had a benevolent, amiable disposition and a prepossessing address. He leaves a widow and a son to whom the sympathy of the medical profession is earnestly extended.

The Santa Barbara and Ventura County Medical Associations held a Union meeting at the Arlington Hotel, Santa Barbara, preceded by a dinner. There was a large attendance from each society. The paper of the evening was by Dr. W. B. Dakin, of Los Angeles.

On October 20th, Dr. W. E. Waddell, of Los Angeles, and Miss Martha Batzka were wedded in Santa Barbara. Miss Batzka has been Dr. Waddell's office assistant for the past six years. She graduated in the Pacific Training School for Nurses and is held in the highest esteem by all who know her.

Dr. and Mrs. Chas. W. Anderson have returned to Los Angeles after spending more than a year in service in the Canadian Medical Corps, in a Base Hospital near Boulogne, France. Medical associations and others who are interested would do well to secure Dr. Anderson to give a talk relating his experiences. He is a most interesting speaker.

The monthly meeting of the San Bernardino County Medical Association, was held at the Union Club, Redlands, on the evening of Nov. 6th. After a buffet luncheon, the physicians listened to an interesting paper by Dr. Dudley Fulton, of Los Angeles. Dr. B. F. Church was elected President of the Association, succeeding Dr. G. G. Mosely, who has located in San Francisco.

Harold Bell Wright, author of "The Winning of Barbara Worth" and other popular stories was recently made defendant in a \$2500 suit filed in the

Superior Court by Dr. William G. Thurber. The physician claims that between September 27 and October 22 of this year that he performed "certain professional services, consisting of advice and consultation" for which he has not received remuneration.

The Los Angeles City Council recently appropriated \$2500 to the Health Department to meet the preliminary expense of establishing a hospital for the treatment of women and men who are victims of the social evil. The Council took the stand that the money should be spent as a war measure. It is expected that when the institution is in full swing a total appropriation of \$25,000 will be needed.

According to the plans patients will be treated under the supervision of the Health Commissioner. Several positions will be created; a woman physician will treat all female patients and several nurses will be employed to assist her.

At a meeting of the Psycopathic Association of California, at the home of Mrs. Joseph Maw, 614 St. Andrews Place, Los Angeles, the following officers for the coming year were elected: President, Curtis D. Wilbur; vice-president, Edward Huntington Williams; secretary and treasurer, Williams S. James; corresponding secretary, Mrs. Joseph Maw. The board of directors for the following year will be, Dr. Charles Lewis Allen, Dr. Henry G. Brainerd, Dr. E. H. Williams, Dr. Thomas Orbison, Judge P. J. McCormick, Judge S. J. Reeve, Judge Curtis D. Wilbnr, Mrs. Franklyn Booth, Mrs. O. P. Clark, Mrs. J. Powers Slint and Mrs. W. S. James. At the conclusion of the meeting, Dr. Norman Martin of the County Charities was elected an active member of the organization and Dr. Marcia Patrick was made an associate member.

#### **BOOK REVIEWS**

PRACTICAL MEDICINE SERIES, comprising ten volumes on the year's progress in medicine and surgery. Under the general editorial charge of Charles L. Mix, A.M., M.D., Professor of Physical Diagnosis in the Northwestern University Medical School. Volume VI. GENERAL MEDICINE. Edited by Frank Billings, M.S., M.D., Head of the Medical Department and Dean of the Faculty of Rush Medical College, Chicago, assisted by Burrell O. Raulston, A.B., M.D., Resident Pathologist, Presbyterian Hospital. Series 1917. Chicago: The Year Book Publishers, 608 Dearborn Street.

The present volume is one of ten issued at about monthly intervals, and covering the entire field of medicine and surgery. Each volume is complete on the subject of which it treats for the year prior to its publication. Price of this volume \$1.50. Price of the series of ten volumes, \$10.00. This series is published primarily for the general practitioner. At the same time the arrangement in several volumes enables those interested in special subjects to buy only the parts they desire.

determination and tests of renal permeability are discussed fully, and the section dealing with diseases of the abdominal organs has been amplified and expanded very greatly, as has also that embracing the infectious diseases, to which has been added a discussion of the more important tropical diseases. It is a pleasure to recommend this work. The series of reproductions of radiographs illustrating heart conditions, is worth the price of the volume. Fortunately, the more progressive practitioners are making more and more use of roentgenoscopy in the study of heart cases. It is a method of study that is coming to the fore very rapidly. Have you tried outlining the heart by percussion, then placing the patient before the roentgenoscope to verify your skill? Try it. You will find it interesting.

new and valuable methods of urea

MEDICAL DIAGNOSIS for the student and practitioner. By Charles Lyman Greene, M.D., St. Paul, Lecturer in Applied Anatomy, University of Minnesota, 1892-4; Professor of Applied Anatomy and Instructor in Clinical Medicine, 1894-7; Professor of Clinical Medicine and Physical Diagnosis, 1897-1903; Professor of the Theory and Practice of Medicine, 1903-9; Professor of Medicine, Chief of the Department of Medicine and Chief of the Medical Clinic in the University Hospitals, 1909-15. With 14 colored plates and 548 other illustrations. Philadelphia: P. Blackiston's Son & Co., 1012 Walnut Street. Price \$10.00 net.

This fourth edition is virtually a new Greene, expanded to over 1300 pages, brought up-to-date, embracing pretty much all that is of proven practical value in modern diagnostic methods. Special attention is devoted to the outward signs of disease. Hematology has been brought thoroughly up-to-date and the newer instruments of diagnostic precision in this field are described and fully illustrated. The

IMPOTENCE AND STERILITY, with Aberration of the Sexual Function and Sex-Gland Implantation. By G. Frank Lydston, M.D., D.C.L. The Riverton Press, Chicago. 1917. Price \$4.00. Sold by subscription only. Sent to physicians postage prepaid on receipt of the subscription price.

If you are interested in Lydston's work with sex-gland implantation, you will want this work and will not regret its purchase. The style of writing is distinctly that of its author, so well known to medical readers. It is a decidedly direct style, easy to read and easy to understand. As to Lydston's work with sex-gland implantation, he seems to have shown that it is practicable and of very great value in supplying the sex hermones.

A TREATISE ON REGIONAL SUR-GERY. By various authors. Edited by John Fairbairn Binnie, A.M., C.M., F.A.C.S., Kansas City, Missouri. Volume II. With 213 illustrations. Philadelphia: P. Blakiston's Son & Co., 1012 Walnut Street. Price \$7.00 net.

This volume is devoted to the abdomen, the genito-urinary system and the spine. The text and illustrations are excellent. Indeed, it is the leading surgical work of the day. Due space is given the consideration of the use of the x-ray in ano-rectal fistula, fractures and dislocations of the spine, diaphragmatic hernia, floating kidney, foreign bodies in the bladder, obstruction of the intestine, nephrolithiasis, pancreatic stones, affections of the stomach, Pott's disease, prostatic enlargement and renal tuberculosis and It is an up-to-date surgery. The list of writers includes many of the leading surgeons of today.

KIRKES' HANDBOOK OF PHYSIOL-OGY. Revised and rewritten by Charles Wilson Greene, A.M., Ph.D., Professor of Physiology and Pharmacology, University of Missouri. Ninth American revision. With 509 illustrations, including many in colors. New York: William Wood and Company. 1917. Price \$3.75.

In this edition the chapter on Nutrition has been revised to call attention to the very fundamental work of Osborne and Mendel on food factors necessary to growth, and of Funk, Voegtlin and others on the vitamines and nutritional diseases. The giant stride of physiology during recent years makes it difficult to keep pace with the literature. Kirkes' Physiology is a standard work that many a practitioner could review with both pleasure and profit.

#### **MISCELLANEOUS**

#### ARTIFICIAL PNEUMOTHORAX

Charles L. Minor, of Asheville, North Carolina, reports in the November number of the American Review of Tuberculosis on one hundred cases of pulmonary tuberculosis treated during the past four and a half years by artificial pneumothorax. He considers it a serious procedure and prefers not to use it on early cases where other effective means are available. Some otherwise hopeless cases have been saved. his one hundred cases, twelve were restored to health and working efficiency; in twenty life was prolonged with comfort and in some with working efficiency; in eleven no entrance was possible owing to adhesions in nine and to uncontrollable nervousness in two; thirteen gave negative results, and forty-four were failures, usually because of adhesions. There were two cases among the hundred in which death was due to the artificial pneumothorax, in one because of a lung abscess which ruptured and in the other because of too rapid collapse. Of the one hundred cases sixty-nine were in the third stage and sixty-four had a doubtful, bad or hopeless prognosis.

Complications and sequelae:

- (1) Adhesions: These are difficult to diagnose with certainty by any means. They are usually bilateral. For injection a spot should be selected where the percussion note is clear. It is best to inject only three hundred cc. at the first and second injections and to avoid high manometric pressures.
- (2) Puncture of the lung: This may occur where adhesions are present. Air may then be injected into the lung, escaping per os or into a pulmonary vessel causing air embolism. If the punctured lung is infected the pleura may be infected when retracting the needle.
- (3) Collection of fluid: In small amounts this may be disregarded. Large amounts are really dangerous because they may become infected by the needle, either from without or

from a punctured infected lung. Removal of the fluid may cause adhesions to form. The replacement of the fluid by air may do good.

- (4) Emphysema: This should be avoided because it troubles the patient. There is temporary pain. If high pressure is used the puncture opening should be strapped tightly with a cotton pellet.
- (5) Nervousness: This may be extreme and uncontrollable and necessitate abandoning any attempt at artificial pneumothorax.
- (6) Pain: This may be caused by touching the intercostal nerve and may be severe. It occurs oftenest when the puncture is made in the ninth interspace below the angle of the scapula. Therefore the author goes in laterally outside the nipple about in the anterior axillary line a point where one is also less likely to find bad adhesions.
- (7) Dyspepsia: This may follow from pressure on the stomach from a right pneumothorax. It occurred in four of the one hundred cases.
- (8) Excessively thin pleura: This may make it impossible to feel the passage of the needle and the puncture may leak. In such a case a patch of thickened pluera should be sought.
- (9) Discomfort from excessive pressure: The author has not had rupture into the good side although such cases have been reported.
- (10) Calcified pleura: One calcified en plaque will make the puncture impossible.
- (11) Trying dyspnoea: This is rare and occurred in only five of the author's cases. In one gas was removed. In using small amounts of air and low pressure it need never be met. The only use of high pressure is to break adhesions, a doubtful procedure since it may lead to haemorrhage.
- (12) Anorexia: This is rare and not serious.

- (13) Waking up better lung: This is the most serious complication except air embolism. Indications are to remove gas and proceed more slowly or stop altogether. Blisters over the waking up areas may be helpful. Prophylaxis consists in careful, initial, steady and slow procedure.
- (14) Air embolism: This is the most serious complication.
- (15) Heart puncture: This may occur when there are dense adhesions and the heart is displaced. The pain is agonizing.

Of the "No Entrance" cases, 100 per cent were doubtful, bad or hopeless.

Of the "Negative" cases, 22 per cent plus were good, or fair, 76 per cent plus were doubtful, bad or hopeless.

Of the "Temporary Successes," 25 per cent plus were good, or fair; 75 per cent plus were doubtful, bad or hopeless.

Of the "Successes Still Getting Gas," 33 per cent were good, 66 per cent were bad.

Of the "Working Successes," 56 per cent were good, or fair, 42 per cent plus were doubtful or bad.

Technique: The apparatus used was the Floyd Robinson, made by Codman and Shurtleff, of Boston. The manometer is rather too short. The needle is good. Every procedure should be controlled by the x-ray. It is in portant to follow the indications of the manometer. For convenience the author uses nitrogen rather than filtered air. Despite certain inherent dangers the procedure is not a dangerous one However, it should be practised only by the experienced.

The method is applicable chiefly to cases that are moderately advanced, advanced or chronic with or without exacerbations, and not too florid, acute, or incipient cases unless these last

show signs of waking up. There is no definite guide as to the duration of treatment but after one year the advisability of removing the gas should be considered in order that the lung may not be kept collapsed too long. In careful hands it is a valuable measure in cases of haemorrhage or abscess. It is important to follow Forlanini's advice as to small amounts, slow injection and low pressure.-Minor, Charles L .: Deductions From Four and One-Half Years' Use of Artificial Pneumothorax in the Treatment of Pulmonary Tuberculosis, Am. Rev. Tub., 1917, Vol. 1, No. 9.

# PRESENT STATUS OF INDUCED PNEUMOTHORAX IN TUBERCULOSIS.

Wm. N. Beggs, of Denvers Colorado, discusses, in the November number of the American Review of Tuberculosis, the present status of induced present thorax in tuberculosis, reviewing the reports and opinions of others and adding the results of his own experience. He summarizes his conclusion as follows:

- 1. While the operation of induced pneumothorax per se is not a dangerous one, the practise of collapse therapy calls for special skill and judgment.
- 2. Collapse therapy unquestionably restores to practical health many otherwise hopeless cases, and prolongs the life and increases the comforts of many others.
- 3. It is of positive influence in decreasing the period of incapacity.
- 4. It should be used in all cases of recurrent, severe and protracted haemorrhage.
- 5. It should be invoked, generally speaking, much earlier than is now the usual custom.
  - 6. In justice to the patient it should

be considered in every case of advanced or moderately advanced, slowly progressive pulmonary tuberculosis in any stage, because the natural trend of all these is toward death.

- 7. Control by frequent skiagraphic and fluoroscopic examinations should be insisted upon wherever at all possible.
- S. As Woodcock well says: "There are dangers in connection with the production of artificial pneumothorax, but the greatest—and about this let there be no mistake—is the neglect in which it is held."—Beggs, William N.: Induced Pneumothorax in Pulmonary Tuberculosis, Am. Rev. Tub., 1917, Vol. 1, No. 9.

#### RELATION OF FISTULA IN ANO TO TÜBERÇÜLOSIS.

.....

Harvey B. Stone, of Baltimore, in the November number of the American Review of Tuberculosis, discusses the relation of fistula in ano to tuberculosis infection, taking up the following points:

- 1. Is any fistula definitely and specifically a tuberculous lesion?
- 2. Is any fistula definitely and specifically not a tuberculous lesion?
- 3. If both of these questions be answered in the affirmative what proportion of fistula cases is definitely tuberculous?
- 4. What proportion of fistula cases is probably but not definitely tuberculous and on what data is this determination made?

He reviews the literature on the subject and on the basis of reported cases and his own, considers the evidence for and against the tuberculous nature of fistula and their relation to other tuberculous foci. He summarizes his conclusions as follows: It is probable that definite tuberculosis cannot

be demonstrated in more than ten per cent of all fistulae.

In a much larger percentage there is some relationship between fistulae and tuberculosis and in perhaps fifteen per cent to thirty per cent of all cases this relationship is fundamental and not merely coincidental.

Various theories have been advanced to explain this relationship but none have been proved.

In a considerable but at present inestimable percentage of cases there is no relationship whatever between fistula and tuberculosis.—Stone, Harvey B.: The Relation of Fistula in Ano to Tubercle Infection, Am. Rev. Tub., 1917, Vol. 1, No. 9.

## THE WASSERMANN AND LUETIN REACTIONS, IN TUBERCULOSIS.

Corper, Gekler and Sweaney, of Chicago, in the November number of the American Review of Tuberculosis, compare the result in tuberculous patients of the luctin and intracutaneous test done with commercial luetin with those of complement fixation done with noncholesterinised beef heart antigen and the Noguchi anti-human hemolytic system. Seventy-nine of a total of 170 negative Wassermann cases gave a positive luctin reaction while only 18 out of a total of 28 positive Wassermann cases gave a positive reaction. They conclude that the luctin reaction cannot be used in tuberculosis sanatoria to displace the Wassermann reaction and that because of the high percentage of luctin reactions in tuberculous patients not due to tertiary or latent syphilis the reaction as carried out today with luctin obtainable on the market is unreliable.-Corper, H. J., Gekler, W. A., and Sweaney, H. C.: The Wassermann and Luetin Reactions in Tuberculosis, Am. Rev. Tub., 1917, Vol. 1, No. 9.

Home Phone 31156.

Sunset East 333.

#### "THE ROSENA REST RETREAT"

A private home, with experienced nurses, for the care and cure of nervous and mental patients. A delightful, permanent home for chronic cases.

Address:

THE ROSENA REST RETREAT,

2814 Downey Ave. (now N. Broadway), Los Angeles, Cal

References:
Dr. H. G. Brainerd, Exchange Bldg.,
Third and Hill, Los Angeles, or any of
the Leading Hospitals.



# RADIUM SULPHUR SPRINGS NATURAL RADIO-ACTIVE MINERAL WATER It Sparkles and Foams Like Champagne Phonymalism, Sciatice,

Hot Baths and Treatments cure Rheumatism, Sciatica, Neuricis, Paralysis, Locomotor Ataxia, Poor Circulation, Hear, Stornach, Liver, Kidney, Diabetes, Bright's, Blood and Nervous Eiseascs, Pemale Troubles. Doctor's advice free. Water delivered. Send for Booklet.

Melrose Ave. Cars Direct to Springs, Los Angeles

# X-Ray Laboratory

Special attention paid to

Radiography of the Chest and Gastro-Intestinal Tract

X-RAY DEPARTMENT of the CALIFORNIA HOSPITAL

# SOUTHERN CALIFORNIA PRACTITIONER

Price Per Year, \$2.00. Single Copies, 25 Cents.

DR. GEO. E. MALSBARY, Editor........500 Auditorium Bullging, Los Angeles, Cal.

Our advertisers are worthy of your support, and if you do not patronize them, you are not rendering the best service to your patients

# What PANOPEPTON Brings to the Patient

Panopepton brings to the living waiting cells of the body the specially adapted material which they require for repair and re-building; it brings the ultimate cleavage derivatives.

These amino-acids of Panopepton are those derived from beef and wheat by means of the same physiological agencies that transform food in the natural normal process of digestion.

The reason for Panopepton, the service for Panopepton, is to supply the patient with the essential suitable cell material at a time when he is unable to elaborate it for himself.

Fairchild Bros. & Foster
New York

Stereoscopic Radiographs of the Chest and Gastro-Intestinal Tract
A SPECIALTY

X-RAY DEPARTMENT OF THE CALIFORNIA HOSPITAL

1414 S. HOPE STREET

LOS ANGELES

# REINFORCES' RESTORES RECONSTRUCTS



## MANY A SUCCESSFUL PHYSICIAN

has learned from practical experience to appreciate the therapeutic efficiency of

# Grays Glycerine Tonic Comp.

FORMULA DR. JOHN P. GRAY

Its prompt effect on the appetite, digestion and nutrition can be confidently relied upon.

If you are not personally familiar with the remarkable tonic properties of "Gray's" write for special six-ounce sample.

#### CONSTITUENTS

Glycerine Sherry Wine Gentian Taraxacum Phosphoric Acid Carminatives

DOSAGE-ADULTS: Two to four teaspoonfuls in a little water before meals three or four times daily.

CHILDREN—One-half to one teaspoonful in water before meals.

INDICATIONS

Auto-Intoxication
Atonic Indigestion
Anemia
Catarrhal Condition
Malnutrition
Nervous Ailments
General Debility

### THE PURDUE FREDERICK CO., 135 CHRISTOPHER STREET, NEW YORK.



ADVERTISED EXCLUSIVELY TO THE MEDICAL PROFESSION. FREE SAMPLES AND LITERATURE FURNISHED ON APPLICATION

### SOUTHERN CALIFORNIA CTITIO

Price Per Year, \$2.00.

Single Copies, 25 Cents.

DR. GEO. E. MALSBARY, Editor......1414 South Hope Street, Los Angeles, Cal.

Our advertisers are worthy of your support, and if you do not patronize them, you are not rendering the best service to your patients

### PANOPEPTON **Provides** "Natural Nourishment

LIBRARY

Panopepton provides, in a directly usable form, all the naturally schable extractable food material of prime lean beef and entire wheat grain—the protein and carbohydrate, the inorganic, the vitalizing principles.

In the making of Panopepton these original food substances are transformed into appropriate cell nutrients by means of the natural enzymic principles of the body, applied in the laboratory under conditions approximated as closely as possible to those of normal digestion. The response of the patient to Panopepton, so familiar to the physician, in renewal of energy, in reparation, is simply the natural response of the organism to nourishment naturally adapted to its present need and condition.

> Fairchild Bros. & Foster New York

Stereoscopic Radiographs of the Chest and Gastro-Intestinal Tract A SPECIALTY

-X-RAY DEPARTMENT OF THE CALIFORNIA HOSPITAL

1414 S. HOPE STREET



### MANY A SUCCESSFUL PHYSICIAN

has learned from practical experience to appreciate the therapeutic efficiency of

## Grays Glycerine Tonic Comp.

FORMULA DR. JOHN P. GRAY

Its prompt effect on the appetite, digestion and nutrition can be confidently relied upon.

If you are not personally familiar with the remarkable tonic properties of "Gray's" write for

special six-ounce sample.

#### CONSTITUENTS

Glycerine
Sherry Wine
Gentian
Taraxacum
Phosphoric Acid
Carminatives

DOSAGE-ADULTS: Two to four teaspoonfuls in a little water before meals three or four times daily.

CHILDREN-One-half to one teaspoonful in water before meals.

INDICATIONS

Auto-Intoxication Atonic Indigestion Anemia Catarrhal Conditions Malnutrition Nervous Ailments General Debility

### THE PURDUE FREDERICK CO., 135 CHRISTOPHER STREET, NEW YORK.

### SOUTHERN CALIFORNIA CTITIO)

Price Per Year, \$2.00.

Single Copies, 25 Cents.

DR. GEO. E. MALSBARY, Editor......1414 South Hope Street, Los Angeles, Cal.

Our advertisers are worthy of your support, and if you do not patronize them, you are not rendering the best service to your patients

### PANOPEPTON **Provides** "Natural Nourishment"

Panopepton provides, in a directly usable form, all the naturally soluable extractable food material of prime lean beef and entire wheat grain—the protein

and carbohydrate, the inorganic, the vitalizing principles.

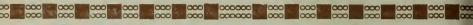
In the making of Panopepton these original food substances are transformed into appropriate cell nutrients by means of the natural enzymic principles of the body, applied in the laboratory under conditions approximated as closely as possible to those of normal digestion. The response of the patient to Panopepton, so familiar to the physician, in renewal of energy, in reparation, is simply the natural response of the organism to nourishment naturally adapted to its present need and condition.

> Fairchild Bros. & Foster New York

Stereoscopic Radiographs of the Chest and Gastro-Intestinal Tract A SPECIALTY

X-RAY DEPARTMENT OF THE CALIFORNIA HOSPITAL

1414 S. HOPE STREET



### MANY A SUCCESSFUL PHYSICIAN

has learned from practical experience to appreciate the therapeutic efficiency of

## Gray's Glycerine Tonic Comp.

FORMULA DR. JOHN P. GRAY

Its prompt effect on the appetite, digestion and nutrition can be confidently relied upon.

If you are not personally familiar with the remarkable tonic properties of "Gray's" write for

special six-ounce sample.

#### CONSTITUENTS

Glycerine
Sherry Wine
Gentian
Taraxacum
Phosphoric Acid
Carminatives

DOSAGE-ADULTS: Two to four teaspoonfuls in a little water before meals three or four times daily.

CHILDREN-One-half to one teaspoonful in water before meals.

#### INDICATIONS

Auto-Intoxication Atonic Indigestion Anemia Catarrhal Conditions Malnutrition Nervous Ailments General Debility

### THE PURDUE FREDERICK CO., 135 CHRISTOPHER STREET, NEW YORK.



### SOUTHERN CALIFORNIA

Price Per Year, \$2.00.

Single Copies, 25 Cents.

DR. GEO. E. MALSBARY, Editor .......1414 South Hope Street, Los Angeles, Cal.

Our advertisers are worthy of your support, and if you do not patronize them, you are not rendering the best service to your patients

### PANOPEPTON Provides "Natural Nourishment

Panopepton provides, in a directly usable form, all the extractable food material of prime lean beef and entire what ain—the protein and carbohydrate, the inorganic, the vitalizing principles

In the making of Panopepton these original food substances are transformed into appropriate cell nutrients by means of the natural enzymic principles of the body, applied in the laboratory under conditions approximated as closely as possible to those of normal digestion. The response of the patient to Panopepton, so familiar to the physician, in renewal of energy, in reparation. is simply the natural response of the organism to nourishment naturally adapted to its present need and condition.

> Fairchild Bros. & Foster New York

Stereoscopic Radiographs of the Chest and Gastro-Intestinal Tract A SPECIALTY

X-RAY DEPARTMENT OF THE CALIFORNIA HOSPITAL

1414 S. HOPE STREET



### MANY A SUCCESSFUL PHYSICIAN

has learned from practical experience to appreciate the therapeutic efficiency of

## Gray's Glycerine Tonic Comp.

FORMULA DR. JOHN P. GRAY

Its prompt effect on the appetite, digestion and nutrition can be confidently relied upon.

If you are not personally familiar with the remarkable tonic properties of "Gray's" write for special six-ounce sample.

CONSTITUENTS

Glycerine Sherry Wine Gentian Taraxacum Phosphoric Acid Carminatives

DOSAGE-ADULTS: Two to four teaspoonfuls in a little water before meals three or four times daily.

CHILDREN-One-half to one teaspoonful in water before meals.

INDICATIONS

Auto-Intoxication
Atonic Indigestion
Anemia
Catarrhal Conditions
Malnutrition
Nervous Ailments
General Debility

### THE PURDUE FREDERICK CO., 135 CHRISTOPHER STREET, NEW YORK.



## SOUTHERN CALIFORNIA PRACTITIONER

Price Per Year, \$2.00.

Single Copies, 25 Cents.

LEGE OF PL

MAY 31 1917

DR. GEO. E. MALSBARY, Editor.....1414 South Hope Street, Los Angeles, Cal.

Our advertisers are worthy of your support, and if you do not patronize them, you are not rendering the best service to your patients

### CARMINZYM

Tablets

CARMINZYM is a true digestive, antacid, some of the highest degree rational and therapeutically more carminage in an original carminage is a new perfected product of well known remedies in an original

Carminzym is especially designed as a resource against acid, fiatulent indigestion, which may occur in consequence of chronic functional disorder and the acute attacks induced by fatigue, exposure, chill, food which may prove stale, unfit or indigestible.

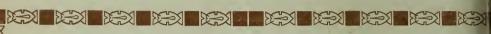
Carminzym is put up in bottles without lettering and containing no circular. Statement of composition on the label. Samples sent to physicians upon request.

Fairchild Bros. & Foster New York

Stereoscopic Radiographs of the Chest and Gastro-Intestinal Tract
FA SPECIALTY

X-RAY DEPARTMENT OF THE CALIFORNIA HOSPITAL

1414 S. HOPE STREET



We are pleased to announce to the Medical Profession the introduction of a

SMALL SIZE (6 oz.)

## Grays Glycerine Tonic Comp.

(FORMULA DR. JOHN P. GRAY.)

The most important reasons for this new departure are briefly:

- 1. A convenient size for R.
- 2. To meet the conditions occasioned by the "high cost of living."
- 3. To insure proper filling of your prescriptions, and as a guard against Substitution.

The regular 16 oz. size will be continued as heretofore. We trust this innovation will be as cordially received by Physicians as has the 16 oz. size for the past 25 years.

THE PURDUE FREDERICK COMPANY,

135 CHRISTOPHER STREET, N. Y. CITY.



Val XXXII

JUNE, 1917.

No. 6

## SOUTHERN CALIFORNIA PRACTITIONER

Price Per Year, \$2.00.

Single Copies, 25 Cents.

DR. GEO. E. MALSBARY, Editor......1414 South Hope Street, Los Angeles, Cal.

Our advertisers are worthy of your support, and if you do not patronize them, you are not rendering the best service to your patients

### CARMINZYM

**Tablets** 

CARMINZYM is a true digestive, antacid, stomachicHth. a combination in the highest degree rational and therapeutically efficient.

Carminzym is a new perfected product of well known remedies in an original

combination.

Carminzym is especially designed as a resource against acid, flatulent indigestion, which may occur in consequence of chronic functional disorder and the acute attacks induced by fatigue, exposure, chill, food which may prove stale, unfit or indigestible.

Carminzym is put up in bottles without lettering and containing no circular. Statement of composition on the label. Samples sent to physicians upon request.

Fairchild Bros. & Foster New York

JUL 6 1917

Stereoscopic Radiographs of the Chest and Gastro-Intestinal Tract
A SPECIALTY

X-RAY DEPARTMENT OF THE CALIFORNIA HOSPITAL

1414 S. HOPE STREET



We are pleased to announce to the Medical Profession the introduction of a

SMALL SIZE (6 oz.)

## Gray's Glycerine Tonic Comp.

(FORMULA DR. JOHN P. GRAY.)

The most important reasons for this new departure are briefly:

- 1. A convenient size for R.
- 2. To meet the conditions occasioned by the "high cost of living."
- To insure proper filling of your prescriptions, and as a guard against Substitution.

The regular 16 oz. size will be continued as heretofore. We trust this innovation will be as cordially received by Physicians as has the 16 oz. size for the past 25 years.

THE PURDUE FREDERICK COMPANY,

135 CHRISTOPHER STREET, N. Y. CITY.



## SOUTHERN CALIFORNIA PRACTITIONER

Price Per Year, \$2.00.

Single Copies, 25 Cents.

DR. GEO. E. MALSBARY, Editor......1414 South Hope Street, Los Angeles, Cal.

Our advertisers are worthy of your support, and if you do not patronize them, you are not rendering the best service to your patients

### CARMINZYM

**Tablets** 

CARMINZYM is a true digestive, antacid, stouche to a combination in the highest degree rational and therapeutically efficient.

Carminzym is a new perfected product of well known remedies in an original combination.

Carminzym is especially designed as a resource against acid, fiatulent indigestion, which may occur in consequence of chronic functional disorder and the acute attacks induced by fatigue, exposure, chill, food which may prove stale, unfit or indigestible.

Carminzym is put up in bottles without lettering and containing no circular. Statement of composition on the label. Samples sent to physicians upon request.

Fairchild Bros. & Foster
New York

Stereoscopic Radiographs of the Chest and Gastro-Intestinal Tract
A SPECIALTY

X-RAY DEPARTMENT OF THE CALIFORNIA HOSPITAL

1414 S. HOPE STREET

We are pleased to announce to the Medical Profession the introduction of a

SMALL SIZE (6 oz.)

## Gray's Glycerine Tonic Comp.

(FORMULA DR. JOHN P. GRAY.)

The most important reasons for this new departure are briefly:

- 1. A convenient size for R.
- 2. To meet the conditions occasioned by the "high cost of living."
- 3. To insure proper filling of your prescriptions, and as a guard against Substitution.

The regular 16 oz. size will be continued as heretofore. We trust this innovation will be as cordially received by Physicians as has the 16 oz. size for the past 25 years.

THE PURDUE FREDERICK COMPANY,

135 CHRISTOPHER STREET, N. Y. CITY.

Vol. XXXII

**AUGUST, 1917.** 

No. 8

## SOUTHERN CALIFORNIA PRACTITIONER

Price Per Year, \$2.00.

Single Copies, 25 Cents.

DR. GEO. E. MALSBARY, Editor......1414 South Hope Street, Los Angeles, Cal.

Our advertisers are worthy of your support, and if you do not patronize them, you are not rendering the best service to your patients

### FOR DEFENSE

The physician who desires to utilize the effective defensive action of the Bacillus Bulgaricus "in combatting the putrefactive organisms producing intestinal autointoxications" has at his command products of proved reliability and efficiency in the Fairchild Culture and Tablet.

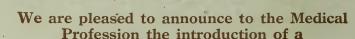
Clinical data illustrative of typical conditions and cases will be sent upon request

Fairchild Bros. & Foster
New York

Stereoscopic Radiographs of the Chest and Gastro-Intestinal Tract

X-RAY DEPARTMENT OF THE CALIFORNIA HOSPITAL

1414 S. HOPE STREET



SMALL SIZE (6 oz.)

## Grays Glycerine Tonic Comp.

(FORMULA DR. JOHN P. GRAY.)

The most important reasons for this new departure are briefly:

- 1. A convenient size for R.
- 2. To meet the conditions occasioned by the "high cost of living."
- 3. To insure proper filling of your prescriptions, and as a guard against Substitution.

The regular 16 oz. size will be continued as heretofore. We trust this innovation will be as cordially received by Physicians as has the 16 oz. size for the past 25 years.

THE PURDUE FREDERICK COMPANY,

135 CHRISTOPHER STREET, N. Y. CITY.

Vol. XXXII

## SOUTHERN CALIFORNIA

Price Per Year, \$2.00.

Single Copies, 25 Cents.

DR. GEO. E. MALSBARY, Editor......1414 South Hope Street, Los Angeles, Cal.

Our advertisers are worthy of your support. and if you do not patronize them, you are not rendering the best service to your patients

### CONFIDENCE Won by Success

Confidence in the therapeutic utility of the Ba has been fairly won under actual clinical use.

This peculiarly energetic microbe as contained in pure and vigorous culture in the FAIRCHILD CULTURE AND TABLET has proved of great service in the treatment of many human ills and illnesses due to intestinal infections. It has demonstrated beyond a doubt its power to overcome toxic intestinal bacteria.

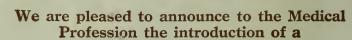
Clinical data upon request.

Fairchild Bros. & Foster New York

Stereoscopic Radiographs of the Chest and Gastro-Intestinal Tract A SPECIALTY

X-RAY DEPARTMENT OF THE CALIFORNIA HOSPITAL

1414 S. HOPE STREET



SMALL SIZE (6 oz.)

## Gray's Glycerine Tonic Comp.

(FORMULA DR. JOHN P. GRAY.)

The most important reasons for this new departure are briefly:

- 1. A convenient size for R.
- 2. To meet the conditions occasioned by the "high cost of living."
- To insure proper filling of your prescriptions, and as a guard against Substitution.

The regular 16 oz. size will be continued as heretofore. We trust this innovation will be as cordially received by Physicians as has the 16 oz. size for the past 25 years.

THE PURDUE FREDERICK COMPANY,

135 CHRISTOPHER STREET, N. Y. CITY.

ADVERTISED EXCLUSIVELY TO THE MEDICAL PROFESSION. FREE SAMPLES AND LITERATURE FURNISHED ON APPLICATION

Vol. XXXII

OCTOBER, 1917.

No. 10

## SOUTHERN CALIFORNIA PRACTITIONER

Price Per Year, \$2.00.

Single Copies, 25 Cents.

DR. GEO. E. MALSBARY, Editor......1414 South Hope Street, Los Angeles, Cal.

Our advertisers are worthy of your support, and if you do not patronize them, you are not rendering the best service to your patients

### CERTAINTY of PRODUCT ASSURED

The FAIRCHILD CULTURE AND TABLET OF THE BACILLUS BULGARICUS are standardized by the most accurate methods known. The culture is tested by direct microscopical examination; by actual count on glucosepepton-agar plates; by ability to proliferate on sterile milk.

These standardized uniform products have been important factors in giving stability to the therapeutic use of the bacillus Bulgaricus as a means of restoring and maintaining "a proper balance of bacterial activity in the intestinal tract."

Clinical data upon request.

Fairchild Bros. & Foster New York

Stereoscopic Radiographs of the Chest and Gastro-Intestinal Tract

A SPECIALTY

X-RAY DEPARTMENT OF THE CALIFORNIA HOSPITAL

1414 S. HOPE STREET

### WHEN A TONIC IS NEEDED

the best obtainable is called for—in its composition, in its quality and character, and above all, in its capacity to promote bodily vitality and strength. In

## Gray's Glycerine Tonic Comp.

#### FORMULA DR. JOHN P. GRAY

the practitioner has at his command a restorative and reconstructive that justifies every confidence. Of the highest quality and constant uniformity—in spite of the drug market—and exceptional therapeutic efficiency, the use of "Grays" is a guarantee that the best possible results will be obtained in each and every case.

For over a quarter of a century "Grays" has been one of the most widely—and successfully—used remedies in atonic and debilitated conditions.

#### COMPOSITION

Glycerine
Sherry Wine
Gentian
Taraxacum
Phosphoric Acid
Carminatives

"Grays" is now supplied in two sizes—
a 6 oz. prescription size, and the original 16 oz. package.

INDICATIONS

Auto-Intoxication Atonic Indigestion Anemia Catarrhal Conditions Malnutrition Nervous Ailments General Debility

THE PURDUE FREDERICK CO., 135 Christopher St., New York

## SOUTHERN CALIFORNIA PRACTITIONER

Price Per Year, \$2.00.

Single Copies, 25 Cents.

DR. GEO. E. MALSBARY, Editor......1414 South Hope Street, Los Angeles, Cal.

Our advertisers are worthy of your support, and if you do not patronize them, you are not rendering the best service to your patients

### AGGRESSIVELY ALIVE in The Fairchild Culture and Tablet

THE AGGRESSIVE LIFE of the Bacillus Bulgaricus is the efficient life. On this premise is based the theory of its therapeutic use; by this fact is explained its clinical success.

From the moment the fresh and vigorous Fairchild Culture leaves the scientific care of the chemist until it reaches the patient, its life is zealously guarded—in the chill room of the laboratory, in every detail of shipping, in the ice box of the pharmacist. And the patient, warned by the physician, does his part also—keeps the culture vital at a low temperature.

Finally, upon administration, the Bacillus Bulgaricus, aggressively alive in the Fairchild Culture and Tablet, at once institutes energetic and effective warfare against the toxic bacteria concerned in intestinal putrefaction.

Clinical Reports
upon Request

Fairchild Bros. & Foster
New York

Stereoscopic Radiographs of the Chest and Gastro-Intestinal Tract

A SPECIALTY

X-RAY DEPARTMENT OF THE CALIFORNIA HOSPITAL

1414 S. HOPE STREET

### WHEN A TONIC IS NEEDED

the best obtainable is called for—in its composition, in its quality and character, and above all, in its capacity to promote bodily vitality and strength. In

## Grays Glycerine Tonic Comp.

#### FORMULA DR. JOHN P. GRAY

the practitioner has at his command a restorative and reconstructive that justifies every confidence. Of the highest quality and constant uniformity—in spite of the drug market—and exceptional therapeutic efficiency, the use of "Grays" is a guarantee that the best possible results will be obtained in each and every case.

For over a quarter of a century "Grays" has been one of the most widely—and successfully—used remedies in atonic and debilitated conditions.

### COMPOSITION

Glycerine
Sherry Wine
Gentian
Taraxacum
Phosphoric Acid
Carminatives

"Grays" is now supplied in two sizes—
a 6 oz. prescription size, and the original 16 oz. package.

### INDICATIONS

Auto-Intoxication Atonic Indigestion Anemia Catarrhal Conditions Malnutrition Nervous Ailments General Debility

THE PURDUE FREDERICK CO., 135 Christopher St., New York

Vol. XXXII

DECEMBER, 1917.

No. 12

## SOUTHERN CALIFORNIA PRACTITIONER

Price Per Year, \$2.00.

Single Copies, 25 Cents.

DR. GEO. E. MALSBARY, Editor......1414 South Hope Street, Los Angeles, Cai.

Our advertisers are worthy of your support, and if you do not patronize them, you are not rendering the best service to your patients

### AGGRESSIVELY ALIVE in The Fairchild Culture and Tablet

THE AGGRESSIVE LIFE of the Bacillus Bulgaricus is the efficient life.

On this premise is based the theory of its therapeutic use; by this fact is explained its clinical success.

From the moment the fresh and vigorous Fairchild Culture leaves the scientific care of the chemist until it reaches the patient, its life is zealously guarded—in the chill room of the laboratory, in every detail of shipping, in the ice box of the pharmacist. And the patient, warned by the physician, does his part also-keeps the culture vital at a low temperature.

Finally, upon administration, the Bacillus Bulgaricus, aggressively alive in the Fairchild Culture and Tablet, at once institutes energetic and effective warfare against the toxic bacteria concerned in intestinal putrefaction.

Clinical Reports
upon Request

Fairchild Bros. & Foster

Stereoscopic Radiographs of the Chest and Gastro-Intestinal Tract

X-RAY DEPARTMENT OF THE CALIFORNIA HOSPITAL

1414 S. HOPE STREET

### WHEN A TONIC IS NEEDED

the best obtainable is called for—in its composition, in its quality and character, and above all, in its capacity to promote bodily vitality and strength. In

## Graß Glycerine Tonic Comp.

#### FORMULA DR. JOHN P. GRAY

the practitioner has at his command a restorative and reconstructive that justifies every confidence. Of the highest quality and constant uniformity—in spite of the drug market—and exceptional therapeutic efficiency, the use of "Grays" is a guarantee that the best possible results will be obtained in each and every case.

For over a quarter of a century "Grays" has been one of the most widely—and successfully—used remedies in atonic and debilitated conditions.

#### COMPOSITION

Glycerine
Sherry Wine
Gentian
Taraxacum
Phosphoric Acid
Carminatives

"Grays" is now supplied in two sizes—
a 6 oz. prescription size, and the original 16 oz. package.

#### INDICATIONS

Auto-Intoxication Atonic Indigestion Anemia Catarrhal Conditions Malnutrition Nervous Ailments General Debility

THE PURDUE FREDERICK CO., 135 Christopher St., New York

H. J. INGERSOLL President W. O. EDDY First Vice-Pres.

L. C. SHINGLE Treasurer

GEORGE L. BUSH Electrical Engineer W. G. HARGIS, Jr. Secretary

### **Bush Electric Corporation**

REPRESENTING

### **Victor Electric Corporation**

EVERYTHING ELECTRICAL FOR THE PHYSICAN OR HOSPITAL

OFFICE AND SALESROOMS

210 BAKER-DETWILER BLDG.

LOS ANGELES

General Office and Salesrooms
334 SUTTER STREET
SAN FRANCISCO

TELEPHONE Broadway 6446

## Unexcelled X-Ray Equipment

There is at

# THE CALIFORNIA HOSPITAL

an X-Ray Equipment that is not surpassed west of Chicago. Every detail the very latest and best for Diagnostic and Therapeutic work.

Expert Roentgenologists
Constantly in Attendance

### 1414 South Hope Street

LOS ANGELES

Main 7610

Home 10061







